
Literature Report

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Abstract

An Alternative to Signaling: Directed Search and Substitution

- American Economic Journal: Microeconomics---2016---Matthew Levy, Balázs Szentes

This paper analyzes a labor market, where: workers can acquire an observable skill at no cost, firms differ in unobserved productivity, workers' skill and firms' productivity are substitutes, and firms' search is directed. The main result is that, if the entry cost of firms is small, no worker acquires the skill in the unique equilibrium. For intermediate entry costs, a positive measure of workers obtain the skill, and the number of skilled workers goes to one as entry costs become large. Welfare is highest when the entry cost is high.

Delegating Multiple Decisions

- American Economic Journal: Microeconomics---2016---Alex Frankel

This paper shows how to extend the heuristic of capping an agent against her bias to delegation problems over multiple decisions. Caps may be exactly optimal when the agent has constant biases, in which case a cap corresponds to a ceiling on the weighted average of actions. More generally caps give approximately

first-best payoffs when there are many independent decisions. The shape of the cap translates into economic intuition on how to let an agent trade off increases on one action for decreases on other actions. I discuss applications to political delegation, capital investments, monopoly price regulation, and tariff policy.

Testing the General Validity of the Heckscher-Ohlin Theorem

- American Economic Journal: Microeconomics---2016---Daniel Bernhofen, John C. Brown

We exploit Japan's mid-nineteenth century transition from autarky to open trade to test Alan Deardorff's (1982) seminal and parsimonious autarky price formulation of the Heckscher-Ohlin theorem. Factor price data from Japan's late autarky period impose a refutable restriction on Japan's factor content of trade. Our data are constructed from many historical sources, including a major Japanese survey of agricultural techniques and a rich set of nineteenth century comparative cost studies. Evaluating Japan's factor content of trade during 1865-1876 under alternative theoretical assumptions about technology, we provide robust evidence in favor of the Heckscher-Ohlin hypothesis.

News Aggregators and Competition among Newspapers on the Internet

- American Economic Journal: Microeconomics---2016---Doh-Shin Jeon,Nikrooz Nasr

This paper studies how news aggregators affect the quality choices of newspapers competing on the Internet. To provide a micro-foundation for the role of the aggregator, we build a model of multiple issues where newspapers choose their quality on each issue. Our model captures well the main trade-off between the "business-stealing" effect and the "readership-expansion" effect. We find that the aggregator increases the quality only if the readership-expansion effect is large enough relative to the business-stealing effect. Using a condition obtained from empirical results, we find that the aggregator increases the quality and social welfare, but affects newspapers' profits ambiguously.

The (Human) Sampler's Curses

- American Economic Journal: Microeconomics---2016---Mark Le Quement

We present a cheap talk model in which a receiver (R) sequentially consults multiple experts who are either unbiased or wish to maximize R's action, bias being unobservable. Consultation is costly and R cannot commit to future consultation behavior. We find that individual expert informativeness negatively relates to consultation extensiveness and expert trustworthiness due to biased experts' incentive to discourage further consultation by mimicking unbiased experts. We identify three (sampler's) curses: R may lose from an increase in the number or in the trustworthiness of experts as well as from a decrease in consultation costs.

Voluntary Contributions and Collective Redistribution

- American Economic Journal: Microeconomics---2016---Andrzej Baranski

I study a multilateral bargaining game in which committee members invest in a common project prior to

redistributing the total value of production. The game corresponds to a Baron and Ferejohn (1989) legislative bargaining model preceded by a production stage that is similar to a voluntary contribution mechanism. In this game, contributions reach almost full efficiency in a random rematching experimental design. Bargaining outcomes tend to follow an equity standard of proportionality: higher contributors obtain higher shares. Unlike other bargaining experiments with an exogenous fund, allocations involving payments to all members are modal instead of minimum winning coalitions, and proposer power is quite low.

Naked Exclusion with Private Offers

- American Economic Journal: Microeconomics---2016---Jeanine Miklós-Thal,Greg Shaffer

We consider a seller's ability to deter potential entrants by offering exclusive contracts to downstream buyers. Previous literature has shown that this can be a profitable strategy if there is a coordination failure on the part of the buyers or if the seller can make discriminatory "divide-and-conquer" offers. This literature assumes that all offers are public. We show that if buyers cannot observe each other's offers and have passive or wary out-of-equilibrium beliefs, the divide-and-conquer exclusion strategy fails. Equilibria in which the incumbent obtains exclusion due to a coordination failure, on the other hand, exist for all out-of-equilibrium beliefs.

Bid Takers or Market Makers? The Effect of Auctioneers on Auction Outcome

- American Economic Journal: Microeconomics---2016---Nicola Lacetera,Bradley J. Larsen,Devin G. Pope,Justin R. Sydnor

Auction design has been studied extensively; however, within a given design, does the process of how an auction is conducted matter as well? We address this question by looking for heterogeneity in the performance of auctioneers in English auctions. We analyze over 850,000 wholesale used car auctions and find significant differences across auctioneers in outcomes

for otherwise similar cars. The performance heterogeneities are stable across time and correlate with subjective evaluations by the auction house. We discuss the mechanisms driving differential performance and find evidence suggesting a role for tactics that generate bidder excitement or urgency.

Exchange Efficiency with Weak Ownership Rights

- American Economic Journal: Microeconomics---2016---Oren Bar-Gill,Nicola Persico

We show that efficient exchange obtains independently of the degree to which a legal system protects the rights of owners. We study a number of different legal rules, including property rules (strong protection), liability rules (any party can take the owner's asset but must pay a legally determined compensation), and even rules that protect the owner's interests very weakly (liability rules with a very low compensation level). Efficiency is obtained as long as the degree of protection provided by law and by the bargaining protocol is not "too" inversely correlated with a party's valuation of the asset.

The Dynamic Free Rider Problem: A Laboratory Study

- American Economic Journal: Microeconomics---2016---Marco Battaglini,Salvatore Nunnari,Thomas Palfrey

We report the results of an experiment that investigates free riding in the accumulation of durable public goods. We consider economies with reversibility, where contributions can be positive or negative; and economies with irreversibility, where contributions are nonnegative. Aggregate outcomes support the qualitative predictions of the Markov Perfect Equilibria (MPE) characterized in Battaglini, Nunnari, and Palfrey (2014): steady state levels of public good are lower with reversibility than irreversibility; accumulation is inefficiently slow; and the public good is under-provided in both regimes. On the other hand, public good levels

are higher than MPE, and some evidence of history dependence is detected.

Achieving Efficiency in Dynamic Contribution Games

- American Economic Journal: Microeconomics---2016---Jaksa Cvitanic,George Georgiadis

We analyze a game in which a group of agents exerts costly effort over time to make progress on a project. The project is completed once the cumulative effort reaches a prespecified threshold, at which point it generates a lump-sum payoff. We characterize a budget-balanced mechanism that induces each agent to exert the first-best effort level as the outcome of a Markov perfect equilibrium, thus eliminating the free-rider problem. We also show how our mechanism can be adapted to other dynamic games with externalities, such as strategic experimentation and the dynamic extraction of a common resource.

Inducing Leaders to Take Risky Decisions: Dismissal, Tenure, and Term Limits

- American Economic Journal: Microeconomics---2016---Philippe Aghion,Matthew Jackson

How can a principal (employer or voter) induce an agent (worker or politician) to choose the "right" actions if risky actions reveal the agent's decision making competence and only dismissal can be used as an incentive instrument? We first show that if the principal can commit to a replacement strategy, then optimal mechanisms involve either (i) a probationary period and then indefinite tenure, or (ii) dismissing poorly performing agents but also randomly replacing agents who take nonrevealing actions. When the principal cannot commit, incentives can be improved by imposing term limits on agents.

Naked Exclusion and the Volatility of Innovation

- American Economic Journal: Microeconomics---2016---Christodoulos Stefanadis

The analysis shows that the volatility of a potential entrant's innovation is an important parameter that shapes an incumbent supplier's exclusivity strategy. Higher volatility encourages the incumbent supplier to adopt an accommodation strategy rather than a pure exclusion strategy. When volatility is above a threshold, the incumbent always chooses accommodation regardless of the expected size of the entrant's innovation. And since an accommodation strategy merely redistributes surplus without blocking efficient entry, it may not warrant a prohibition of exclusivity contracts by the antitrust authorities.

Comparative Risk Aversion in the Presence of Ambiguity

- American Economic Journal: Microeconomics---2016---Marie-Charlotte Guetlein

his paper suggests a characterization of increases in risk aversion within the smooth ambiguity model by Klibanoff, Marinacci, and Mukerji (2005). I show that an increase in risk aversion is qualitatively different from that under expected utility, due to the incomplete separation between risk and ambiguity attitude. The analysis clarifies how ambiguity perception and attitude depend on risk aversion.

Screening for Good Patent Pools through Price Caps on Individual Licenses

- American Economic Journal: Microeconomics---2016---Aleksandra Boutin

Patent pools reduce prices when selling complementary inputs to technologies, but can also effectively cartelize markets when involving substitutes. Independent licensing, by reintroducing competition, ensures that only good pools form when there are two patent holders involved. For larger pools, independent licensing needs to be complemented by other policy tools. We propose to constrain the royalties for the patents individually licensed outside the pool with price caps replicating the pool's sharing rule. This information-free screening device works with asymmetries, even

when licensors try to stabilize pools by readjusting the sharing rule in a way that may not reflect contributions.

Keeping Secrets: The Economics of Access Deterrence

- American Economic Journal: Microeconomics---2016---Emeric Henry, Francisco Ruiz-Aliseda

Keeping valuable secrets requires costly protection efforts. Breaking them requires costly search efforts. In a dynamic model in which the value of the secret decreases with the number of those holding it, we examine the secret holders' protection decisions and the secret breakers' timing of entry, showing that the original secret holder's payoff can be very high, even when protection appears weak, with implications for innovators' profits from unpatented innovations. We show that the path of entry will be characterized by two waves, the first of protected entry followed by a waiting period, and a second wave of unprotected entry.

Strategic Information Acquisition and Transmission

- American Economic Journal: Microeconomics---2016---Rossella Argenziano, Sergei Severinov, Francesco Squintani

This paper explores the implications of costly information acquisition in a strategic communication setting. We show that equilibrium decisions based on a biased expert's advice may be more precise than when information is directly acquired by the decision maker, even if the expert is not more efficient than the decision maker at acquiring information. This result bears important implications for organization design. Communication by an expert to a decision maker may often outperform delegation of the decision-making authority to the expert, as well as centralization by the decision maker of both information acquisition and decision-making authority.

Search Advertising

- American Economic Journal: Microeconomics---2016---Alexandre de Cornière

Search engines enable advertisers to target consumers based on the query they have entered. In a framework in which consumers search sequentially after having entered a query, I show that such targeting reduces search costs, improves matches and intensifies price competition. However, a profit-maximizing monopolistic search engine imposes a distortion by charging too high an advertising fee, which may negate the benefits of targeting. The search engine also has incentives to provide a suboptimal quality of sponsored links. Competition among search engines can increase or decrease welfare, depending on the extent of multi-homing by advertisers.

Either or Both Competition: A "Two-Sided" Theory of Advertising with Overlapping Viewerships

- American Economic Journal: Microeconomics---2016---Attila Ambrus, Emilio Calvano, Markus Reisinger

In media markets, consumers spread their attention to several outlets, increasingly so as consumption migrates online. The traditional framework for competition among media outlets rules out this behavior by assumption. We propose a new model that allows consumers to choose multiple outlets and use it to study the effects on advertising levels and the impact of entry and mergers. We identify novel forces which reflect outlets' incentives to control the composition of their customer base. We link consumer preferences and advertising technologies to market outcomes. The model can explain several empirical regularities that are difficult to reconcile with existing models.

Just Enough or All: Selling a Firm

- American Economic Journal: Microeconomics---2016---Mehmet Ekmekci, Nenad Kos, Rakesh Vohra

We consider the problem of selling a firm to a single buyer. The buyer privately knows post-sale cash flows and the benefits of control. Unlike the case where buyer's private information is one-dimensional, the optimal mechanism is a menu of tuples of cash-equity

mixtures. When the seller wants to screen finely with respect to the private benefits, he makes an offer for the smallest fraction of the company that facilitates the transfer of control. When he wants to screen finely with respect to cash flows, he makes an offer for all the shares of the company.

Bailouts and the Preservation of Competition: The Case of the Federal Timber Contract Payment Modification Act

- American Economic Journal: Microeconomics---2016---James W. Roberts, Andrew Sweeting

We estimate the value of competition in United States Forest Service (USFS) timber auctions, in the context of the Reagan administration's bailout of firms that faced substantial losses on existing contracts. We use a model with endogenous entry by asymmetric firms, allowing survivors to respond to the exit of bailed-out firms by entering more auctions and for these marginal entrants to have lower values than firms that would choose to enter in any event, a selective entry effect. Observed asymmetries and selective entry contribute to us finding that the bailout may have increased USFS revenues in subsequent auctions quite substantially.

The Utilitarian Relevance of the Aggregation Theorem

- American Economic Journal: Microeconomics---2016---Marc Fleurbaey, Philippe Mongin

Harsanyi (1955) invested his Aggregation Theorem and Impartial Observer Theorem with utilitarian sense, but Sen (1986) described them as "representation theorems" with little ethical import. This critical view has never been subjected to full analytical scrutiny. The formal argument we provide here supports the utilitarian relevance of the Aggregation Theorem. Following a hint made by Sen himself, we posit an exogenous utilitarian ordering that evaluates riskless options by the sum of individual utilities, and we show that any social observer who obeys the conditions of the Aggregation Theorem evaluates social states in terms of a weighted variant of this utilitarian sum.

Detecting Bidders Groups in Collusive Auctions

- American Economic Journal: Microeconomics---2016---Timothy G. Conley, Francesco Decarolis

We study entry and bidding in procurement auctions where contracts are awarded to the bid closest to a trimmed average bid. These auctions, common in public procurement, create incentives to coordinate bids to manipulate the bid distribution. We present statistical tests to detect coordinated entry and bidding choices. The tests perform well in a validation dataset where a court case makes coordination observable. We use the tests to detect coordination in a larger dataset where it is suspected, but not known. The results are used to interpret a major market shakeout following a switch to first price auctions. (JEL D44, D47, H57, R42)

Separating Bayesian Updating from Non-Probabilistic Reasoning: An Experimental Investigation

- American Economic Journal: Microeconomics---2016---Dan Levin, James Peck, Asen Ivanov

Through a series of decision tasks involving colored cards, we provide separate measures of Bayesian updating and non-probabilistic reasoning skills. We apply these measures to (and are the first to study) a common-value Dutch auction. This format is more salient than the strategically equivalent first-price auction and silent Dutch formats in hinting that one should condition one's estimate of the value on having the highest bid. Both Bayesian updating skills and non-probabilistic reasoning skills are shown to help subjects correct for the winner's curse, as does the saliency of the active-clock Dutch format. (JEL D12, D44, D83)

Flip-Flopping, Primary Visibility, and the Selection of Candidates

- American Economic Journal: Microeconomics---2016---Marina Agranov

We present an incomplete information model of two-stage elections in which candidates can choose different

platforms in primaries and general elections. Voters do not directly observe the chosen platforms, but infer the candidates' ideologies from observing candidates' campaigns. The ability of voters to detect candidates' types depends on the visibility of the race. This model captures two patterns: the post-primary moderation effect, in which candidates pander to the party base during the primary and shift to the center in the general election; and the divisive-primary effect, which refers to the detrimental effect of hard-fought primaries on a party's general-election prospects. (JEL D11, D72, D83)

Generalized Systematic Risk

- American Economic Journal: Microeconomics---2016---Ohad Kadan, Fang Liu, Suying Liu

We generalize the concept of "systematic risk" to a broad class of risk measures potentially accounting for high distribution moments, downside risk, rare disasters, as well as other risk attributes. We offer two different approaches. First is an equilibrium framework generalizing the Capital Asset Pricing Model, two-fund separation, and the security market line. Second is an axiomatic approach resulting in a systematic risk measure as the unique solution to a risk allocation problem. Both approaches lead to similar results extending the traditional beta to capture multiple dimensions of risk. The results lend themselves naturally to empirical investigation. (JEL D81, G11, G12)

Unpacking the Long-Run Effects of Tariff Shocks: New Structural Implications from Firm Heterogeneity Models

- American Economic Journal: Microeconomics---2016---Alan Spearot

I derive a novel solution for the general equilibrium effects of tariffs that is robust to heterogeneity across industries and countries, and is a function of only aggregate trade data and country-by-industry Pareto shape parameters. Using the model to evaluate tariff shocks, I show that while most countries lose by removing observed tariffs unilaterally, India, Japan, Korea, and the

United States gain by doing so, which suggests inefficient tariff discrimination. In evaluating multilateral shocks, observed tariff cuts over 1994–2000 benefit 69 percent of countries, with these benefits skewed toward developing nations. In contrast, removing all post-2000 tariffs benefit the developed. (JEL F12, F13, F14)

Entry Deterrence in Dynamic Second-Price Auctions

- American Economic Journal: Microeconomics---2016---XiaoGang Che,Tilman Klumpp

We examine a dynamic second-price auction with independent private values and sequential costly entry. We show that delayed revelation equilibria exist in which some buyers place coordinated low early bids. These buyers revise their bids to reflect their true valuations just prior to the end of the auction. Compared to the benchmark immediate revelation equilibrium, in which buyers bid their valuations immediately after entry, fewer high-value bidders enter on expectation in the delayed revelation equilibria. Delayed revelation of buyer values decreases social welfare, but is necessary for bidders to have a strict participation incentive. (JEL D44, D82, D83)

Manipulability of Stable Mechanisms

- American Economic Journal: Microeconomics---2016---Peter Chen,Michael Egedal,Marek Pycia,M. Bumin Yenmez

We study the manipulability of stable matching mechanisms and show that manipulability comparisons are equivalent to preference comparisons: for any agent, a mechanism is more manipulable than another if and only if this agent prefers the latter to the former. One important implication is that when agents on one side of the market have unit demand, no stable matching mechanism is less manipulable than another for all agents. (JEL C78, D82)

Affirmative Action: One Size Does Not Fit All

- American Economic Journal: Microeconomics---2016---Kala Krishna,Alexander Tarasov

This paper identifies a new reason for giving preferences to the disadvantaged using a model of contests. There are two forces at work: the effort effect working against giving preferences and the selection effect working in favor of them. When education is costly and easy to obtain (as in the United States), the selection effect dominates. When education is heavily subsidized and limited in supply (as in India), preferences are welfare reducing. The model also shows that unequal treatment of identical agents can be welfare improving, providing insights into when the counterintuitive policy of rationing educational access to some subgroups is welfare improving. (JEL H52, H75, I23, I28, J15, O15)

Team versus Individual Play in Finitely Repeated Prisoner Dilemma Games

- American Economic Journal: Microeconomics---2016---John Kagel,Peter McGee

In finitely repeated prisoner dilemma games, two-person teams start with significantly less cooperation than individuals, consistent with results from the psychology literature. This quickly gives way to teams cooperating more than individuals. Team dialogues show increased payoffs from cooperation, along with anticipating opponents' recognition of the same, provides the basis for cooperation, even while fully anticipating defection near the end game. A strong status quo bias in defecting across super-games limits unraveling. Defecting typically occurs one round earlier across super-games, consistent with low marginal, or even negative, benefits of more than one-step-ahead defection. (JEL C72, C73, C90, D12)

Character Endorsements and Electoral Competition

- American Economic Journal: Microeconomics---2016---Archishman Chakraborty,Parikshit Ghosh

When an elite-controlled media strategically endorses candidates in order to promote its own ideological agenda, office-seeking parties may completely pander to the media, under moderate ideological conflict between voters and the elite. Larger ideological conflict leads

to polarization—parties either become media darlings or run populist campaigns. The welfare effects are: (i) delegation by the media owner to a more moderate editor is Pareto improving, (ii) the median voter is never better off delegating voting rights to the informed elite, (iii) a majority of voters may be better off if the informed media did not exist. (JEL D72, D83, L82)

Exploitative Innovation

- American Economic Journal: Microeconomics---2016---Paul Heidhues, Botond Köszegi, Takeshi Murooka, Botond Köszegi

We analyze innovation incentives when firms can invest either in increasing the product's value (value-increasing innovation) or in increasing the hidden prices they collect from naive consumers (exploitative innovation). We show that if firms cannot return all profits from hidden prices by lowering transparent prices, innovation incentives are often stronger for exploitative than for value-increasing innovations, and are strong even for non-appropriable innovations. These results help explain why firms in the financial industry (e.g., credit-card issuers) have been willing to make innovations others could easily copy, and why these innovations often seem to have included exploitative features. (JEL D21, G21, L11, L25, O31)

Internal Geography, International Trade, and Regional Specialization

- American Economic Journal: Microeconomics---2016---A. Kerem Coşar, Pablo Fajgelbaum

We introduce an internal geography to the canonical model of international trade driven by comparative advantages to study the regional effects of external economic integration. The model features a dual-economy structure, in which locations near international gates specialize in export-oriented sectors while more distant locations do not trade with the rest of the world. The theory rationalizes patterns of specialization, employment, and relative incomes observed in developing countries that opened up to trade. We find regional specialization patterns consistent with the model in

industry-level data from Chinese prefectures. (JEL F11, O18, P23, P25, P33, R12, R32)

Dynamic Signaling with Dropout Risk

- American Economic Journal: Microeconomics---2016---Francesc Dilme, Fei Li

We study the role of dropout risk in dynamic signaling. A seller privately knows the quality of an indivisible good and decides when to trade. In each period, he may draw a dropout shock that forces him to trade immediately. To avoid costly delay, the seller with a low-quality good voluntarily pools with early dropouts, implying that the expected quality of the good increases over time. We characterize the time-varying equilibrium trading dynamics. It is demonstrated that the maximum equilibrium delay of trade is decreasing in the initial belief that the good is of high quality. (JEL C73, D82, D83)

Social Learning with Costly Search

- American Economic Journal: Microeconomics---2016---Manuel Mueller-Frank, Mallesh M. Pai

We study a sequential social learning model where agents privately acquire information by costly search. Search costs of agents are private, and are independently and identically distributed. We show that asymptotic learning occurs if and only if search costs are not bounded away from zero. We explicitly characterize equilibria for the case of two actions, and show that the probability of late moving agents taking the suboptimal action vanishes at a linear rate. Social welfare converges to the social optimum as the discount rate converges to one if and only if search costs are not bounded away from zero. (JEL D81, D83)

Belief Elicitation with a Synchronized Lottery Choice Menu That Is Invariant to Risk Attitudes

- American Economic Journal: Microeconomics---2016---Charles Holt, Angela M. Smith

This paper uses a Bayesian information processing task to compare belief elicitation mechanisms including a

quadratic scoring rule, a Becker-DeGroot-Marschak pricing procedure, and a two-stage menu of lottery choices that is structured to identify a precise point of probability indifference. The choice menu yields a higher incidence of correct Bayesian responses and lower belief error averages. Unlike the quadratic scoring rule, the binary payoffs for the lottery choice mechanism are synchronized to provide theoretical incentive-compatibility regardless of risk attitudes. In addition, the choice menu structure is more transparent and intuitive than the Becker-DeGroot-Marschak procedure. (JEL C91, D44, D81, D83)

Don't Demotivate, Discriminate

- American Economic Journal: Microeconomics---2016---Jurjen Kamphorst, Otto H. Swank

This paper offers a new theory of discrimination in the workplace. We consider a manager who has to assign two tasks to two employees. The manager has superior information about the employees' abilities. We show that besides an equilibrium where the manager does not discriminate, equilibria exist where the manager discriminates in favor of the employee whom the employees expect to be favored. The manager, who has no taste for discrimination, discriminates in order to avoid demotivating the "favorite". We show that the nondiscriminatory equilibrium is unstable. Yet the manager would prefer to commit not to discriminate. (JEL D82, D84, J71, M12, M51, M54)

Investing in Skill and Searching for Coworkers: Endogenous Participation in a Matching Market

- American Economic Journal: Microeconomics---2016---Chris Bidner, Guillaume Roger, Jessica Moses

We demonstrate how search frictions have important yet subtle implications for participation in a skilled labor market by studying a model in which agents invest in skill prior to searching for coworkers. Search frictions induce the existence of acceptance-constrained equilibria, whereby matching concerns—as opposed to investment costs—dissuade the marginal agent from

investing and participating in the skilled matching market. Such equilibria are robust, relevant, and have comparative static properties that contrast sharply with the intuitive properties arising in a benchmark static setting. We consider an extension with separate matching "marketplaces," and show that our main results continue to hold. (JEL C78, D83, J24)

Reallocation Costs and Efficiency

- American Economic Journal: Microeconomics---2016---Yuval Salant, Ron Siegel

We study the efficient allocation of a divisible asset when reallocation is costly. Two players initially divide an asset between them. At the time of this initial division the players' valuations for the asset are uncertain. After the uncertainty resolves, costly reallocation may take place. We first establish that the surplus associated with efficient reallocation monotonically increases or decreases in the concentration of the initial division for a wide range of cost specifications. We then characterize how the budget necessary to implement the efficient reallocation changes with the initial division. (JEL D11, D63, D81)

Falling Dominoes: A Theory of Rare Events and Crisis Contagion

- American Economic Journal: Microeconomics---2016---Heng Chen, Wing Suen

Crises, such as revolutions and currency attacks, rarely occur; but when they do they typically arrive in waves. The rarity of crises is an important contagion mechanism in a multiple-country dynamic global game model. When players are uncertain about the true model of the world, observing a rare success elsewhere can substantially change their expectations concerning the payoffs from attacking or defending the regime. Such dramatic revisions in beliefs, amplified by strategic complementarity in actions, may lead to a series of attacks in other countries. The crisis period can be long-lasting, but will eventually come to an end. (JEL D74, D83, F33, G01)

Intermediaries in Two-Sided Markets: An Empirical Analysis of the US Cable Television Industry

- American Economic Journal: Microeconomics---2016---Andre Boik

Local television stations are platforms in a two-sided market connecting advertisers and viewers. This paper explicitly examines the effect that important intermediaries (such as cable, telephone, and satellite distributors) may have on a platform's pricing behavior in a two-sided market. I find that stations raise their fees to cable distributors because stations prefer that viewers access their content through satellite distributors with whom they do not compete in the local advertising market, and that station mergers lower stations' fees to distributors by partially internalizing a pricing externality that results from the mandatory bundling of local content. (JEL C78, D12, G34, L11, L82, M37)

A Theory of Rational Demand for Index Insurance

- American Economic Journal: Microeconomics---2016---Daniel Clarke

Rational demand for index insurance products is shown to be fundamentally different to that for indemnity insurance products due to the presence of basis risk. In particular, optimal demand is zero for infinitely risk-averse individuals, and is nonmonotonic in risk aversion, wealth, and price. For a given belief, upper bounds are derived for the optimal demand from risk-averse and decreasing absolute risk-averse decision makers. A simple ratio for monitoring basis risk is presented and applied to explain the low level of demand for consumer hedging instruments as a rational response to deadweight costs and basis risk. (JEL D14, D81, G13, G22, Q14)

Uncertainty and Trade Agreements

- American Economic Journal: Microeconomics---2015---Nuno Limão, Giovanni Maggi

We explore conditions under which trade agreements can provide gains by reducing trade policy uncertainty.

Given the degree of income risk aversion, this is more likely when economies are more open, export supply elasticities are lower, and economies more specialized. Governments have stronger incentives to sign trade agreements when the trading environment is more uncertain. As exogenous trade costs decline, the gains from reducing tariff uncertainty become more important relative to reducing average tariff levels. We also develop a simple "sufficient statistic" approach to quantify the gains from managing trade policy uncertainty, and examine the impact of ex ante investments on such gains. (JEL D81, F13)

Inefficiencies in Networked Markets

- American Economic Journal: Microeconomics---2015---Matthew Elliott

In many markets, relationship specific investments are necessary for trade. These formed relationships constitute a networked market in which not all buyers can trade with all sellers. We show that networked markets can be decomposed to identify how alternative trading opportunities affect who trades with whom and at what price. This uncovers agents' incentives to invest in relationships. Investment inefficiencies can eliminate all the gains from trade, but for reasons that differ depending on how investments are made. Three applications are considered in detail: high-skill labor markets, merger markets when industries are consolidating, and the international market for natural gas. (JEL C78, D85, D86)

Market Structure, Reputation, and the Value of Quality Certification

- American Economic Journal: Microeconomics---2015---Daniel W. Elfenbein, Raymond Fisman, Brian McManus

Quality certification programs help consumers identify high-quality products or sellers in markets with information asymmetries. Using data from eBay UK's online marketplace, we study how certification's impact on demand varies with market- and seller- level attributes, exploiting variation in sellers' certification

status within groups of near-identical listings. The positive effects of eBay's "top rated seller" certification are stronger for categories with few other certified sellers, in more competitive markets, and for sellers with shorter records of past performance. These findings indicate certification provides more value when certification is rare, the product space is crowded, and for sellers lacking established reputations. (JEL D12, D82, L15, L86)

Learning from Others? Decision Rights, Strategic Communication, and Reputational Concerns

- American Economic Journal: Microeconomics---2015---Otto Swank,Bauke Visser

We examine centralized versus decentralized decision making when experience of agents is private information and communication is necessary to learn from others. An agent has reputational concerns and his market may or may not observe what the other agent chooses (global versus local markets). With decentralized decision making, agents' willingness to communicate depends heavily on what a market observes. Strikingly, less communication may improve welfare. If markets are global, centralization outperforms decentralization as it makes communication possible, and communication is informative for any finite degree of conflict among agents and with the center. (JEL D60, D82, D83)

Collective Dynamic Choice: The Necessity of Time Inconsistency

- American Economic Journal: Microeconomics---2015---Matthew Jackson,Leeat Yariv

We study collective decisions by time-discounting individuals choosing a common consumption stream. We show that with any heterogeneity in time preferences, every Pareto efficient and non-dictatorial method of aggregating utility functions must be time-inconsistent. We also show that decisions made via non-dictatorial voting methods are intransitive. (JEL D71, D72, D91)

Inferring Rationales from Choice: Identification for Rational Shortlist Methods

- American Economic Journal: Microeconomics---2015---Rohan Dutta,Sean Horan

A wide variety of choice behavior inconsistent with preference maximization can be explained by Manzini and Mariotti's Rational Shortlist Methods. Choices are made by sequentially applying a pair of asymmetric binary relations (rationales) to eliminate inferior alternatives. Manzini and Mariotti's axiomatic treatment elegantly describes which behavior can be explained by this model. However, it leaves unanswered what can be inferred, from observed behavior, about the underlying rationales. Establishing this connection is fundamental not only for applied and empirical work but also for meaningful welfare analysis. Our results tightly characterize the surprisingly rich relationship between behavior and the underlying rationales. (JEL D11, D12, D83, M37)

Group Polarization in a Model of Information Aggregation

- American Economic Journal: Microeconomics---2015---Nicolas Roux,Joel Sobel

Experiments identify the empirical regularity that groups tend to make decisions that are more extreme, but in the same direction as the tendency of individual members of the group. We present a model of information aggregation consistent with these findings. We assume individuals and groups are rational decision makers facing monotone statistical decision problems where groups and individuals have common preferences, but groups have superior information. We provide conditions under which the distribution of the optimal actions of the group is more variable than the distribution of actions taken by individuals. (JEL D71, D83)

Beneficial Long Communication in the Multiplayer Electronic Mail Game

- American Economic Journal: Microeconomics---2015---Kris De Jaegher

In the two-player electronic mail game (EMG), as is well-known, the probability of collective action is lower the more confirmations and reconfirmations are made available to players. In the multiplayer EMG, however, we show players may coordinate on equilibria where they require only few of the available confirmations from each other to act. In this case, increasing the number of available confirmations may either create equilibria with positive probability of collective action when none existed before, or may increase the probability of collective action, if equilibria with positive probability of collective action already existed for fewer available confirmations. (JEL C70, D71, D82, D83)

Mechanisms for Repeated Trade

- American Economic Journal: Microeconomics---2015---Andrzej Skrzypacz, Juuso Toikka

How does feasibility of efficient repeated trade depend on the features of the environment such as persistence of values, private information about their evolution, or trading frequency? We derive a necessary and sufficient condition for efficient, unsubsidized, and voluntary trade, which implies that efficient contracting requires sufficient congruence of expectations. This translates to bounds on persistence of values and on private information about their evolution, and distinguishes increasing patience from more frequent interaction; the latter need not facilitate efficiency even when the former does. We also discuss second-best mechanisms and extend the characterization to general dynamic collective choice problems. (JEL C73, D82, D86)

Bankruptcy: Is It Enough to Forgive or Must We Also Forget?

- American Economic Journal: Microeconomics---2015---Ronel Elul, Piero Gottardi

In many countries, lenders are restricted in their access to information about borrowers' past defaults. We study this provision in a model of repeated borrowing and lending with moral hazard and adverse selection. We analyze its effects on borrowers' incentives and

credit access, and identify conditions under which it is welfare improving. Our model's predictions are consistent with the evidence on the impact of these credit bureau regulations on borrowers' and lenders' behavior as well as on credit provision. We also show that "forgetting" must be the outcome of a regulatory intervention. (JEL D14, D82, G33, K35, L26)

Majority Rule and Utilitarian Welfare

- American Economic Journal: Microeconomics---2015---Vijay Krishna, John Morgan

We study the welfare properties of majority and supermajority rules when voting is costly and values, costs, and electorate sizes are all random. Unlike previous work, where the electorate size was either fixed or Poisson distributed, and exhibited no limiting dispersion, we allow for general distributions that permit substantial dispersion. We identify conditions on these distributions guaranteeing that a large election under majority rule produces the utilitarian choice with probability one. Absent these conditions, nonutilitarian outcomes are possible, as we demonstrate. We also show that majority rule is the only voting rule with the utilitarian property—strict supermajority rules are not utilitarian. (JEL D71, D72)

Pricing and Efficiency in the Market for IP Addresses

- American Economic Journal: Microeconomics---2015---Benjamin Edelman, Michael Schwarz

We consider market rules for transferring IP addresses, numeric identifiers required by all computers connected to the Internet. Transfers usefully move resources from lowest- to highest-valuation networks, but transfers tend to cause socially costly growth in the Internet's routing table. We propose a market rule that avoids excessive trading and comes close to achieving social efficiency. We argue that this rule is feasible despite the limited powers of central authorities. We also offer a framework for reasoning about future prices of IP addresses, then explore the role of rentals in sharing

information about the value of IP address and assuring allocative efficiency. (JEL D47, D82, D85, L86)

What Makes Them Click: Empirical Analysis of Consumer Demand for Search Advertising

- American Economic Journal: Microeconomics---2015---Przemyslaw Jeziorski,Ilya Segal

We study users' responses to sponsored-search advertising using consumer-level data from Microsoft Live. We document that users click ads in a nonsequential order and that the click through rates depend on the identity of competing ads. We estimate a dynamic model of utility-maximizing users that rationalizes these two facts and find that 51 percent more clicks would occur if ads faced no competition. We demonstrate that optimal matching of advertisements to positions raises welfare by 27 percent, and that individual-level targeting raises welfare by 69 percent. Revealing the quality of the advertiser prior to clicking on a sponsored link raises welfare by 1.6 percent. (JEL D12, L86, M37)

Collusion and the Organization of the Firm

- American Economic Journal: Microeconomics---2015---Alfredo Burlando,Alberto Motta

This paper shows that the threat of collusion between a productive agent and the auditor in charge of monitoring production can influence a number of organizational dimensions of the firm, including outsourcing decisions and the allocation of production costs. We find that the optimal organizational response to internal collusion lets the agent choose between working outside the firm with no monitoring, or working within the firm with monitoring. In equilibrium, there are no rents due to collusion and the efficient worker works outside the firm. The results are robust to a number of extensions. (JEL D21, D43, D82, D86, L12, L13)

Cyber-Shilling in Automobile Auctions: Evidence from a Field Experiment

- American Economic Journal: Microeconomics---2015---David Grether,David Porter,Matthew Shum

We run a large field experiment with an online company specializing in selling used automobiles via ascending auctions. We manipulate experimentally the "price grid," or the possible amounts that bidders can bid above the current standing price. Using two diverse auction sites, one in New York and one in Texas, we find that buyer and seller behavior differs strikingly across the two sites. Specifically, in Texas we find peculiar patterns of bidding among a small but prominent group of buyers suggesting that they are "cyber-shills" working on behalf of sellers. These patterns do not appear in the New York auctions. (JEL C93, D12, D44, L62, L81)

Net Neutrality, Business Models, and Internet Interconnection

- American Economic Journal: Microeconomics---2015---Jay Choi,Doh-Shin Jeon,Byung-Cheol Kim

We analyze the effect of net neutrality regulation in a two-sided market framework when content is heterogeneous in its sensitivity to delivery quality. We characterize the equilibrium in a neutral network constrained to offer the same quality vis-à-vis a non neutral network where Internet service providers are allowed to engage in second degree price discrimination with a menu of quality-price pairs. We find that the merit of net neutrality regulation depends crucially on content providers' business models. More generally, our analysis can be considered a contribution to the literature on second-degree price discrimination in two-sided platform markets. (JEL D42, D43, D85, L51, L86, L88)

Achieving Cooperation under Privacy Concerns

- American Economic Journal: Microeconomics---2015---Wioletta Dziuda,Ronen Gradwohl

Two players choose whether to cooperate on a project. Each of them is endowed with some evidence, and if both possess a sufficient amount, then cooperation is profitable. In order to facilitate cooperation, the players reveal evidence to one another. However, some

players are concerned about privacy, and so revelation of evidence that does not result in cooperation is costly. We show that in equilibrium evidence can be exchanged both incrementally and all at once, and identify conditions under which the different rates of evidence exchange are optimal. (JEL C71, D83)

Referrals: Peer Screening and Enforcement in a Consumer Credit Field Experiment

- American Economic Journal: Microeconomics---2015---Gharad Bryan, Dean Karlan, Jonathan Zinman

Empirical evidence on peer intermediation lags behind both theory and practice in which lenders use peers to mitigate adverse selection and moral hazard. Using a referral incentive under individual liability, we develop a two-stage field experiment that permits separate identification of peer screening and enforcement. Our key contribution is to allow for borrower heterogeneity in both ex ante repayment type and ex post susceptibility to social pressure. Our method allows identification of selection on repayment likelihood, selection on susceptibility to social pressure, and loan enforcement. Implementing our method in South Africa we find no evidence of screening but large enforcement effects. (JEL D14, D82, G21, O12, O16)

Antitrust Leniency with Multiproduct Colluders

- American Economic Journal: Microeconomics---2015---Leslie M. Marx, Claudio Mezzetti, Robert C. Marshall

We use a global games approach to model alternative implementations of an antitrust leniency program as applied to multiproduct colluders. We derive several policy design lessons; e.g., we show that it is possible that linking leniency across products increases the likelihood of conviction in the first product investigated but reduces it in subsequent products. Thus, firms may have an incentive to form sacrificial cartels and apply for leniency in less valuable products to reduce convictions in more valuable products. Cartel profiling can mitigate this undesirable effect, but also reduces

the probability of conviction in the first product investigated. (JEL D43, D86, K21, L12, L41)

Two-Sided Matching with Endogenous Preferences

- American Economic Journal: Microeconomics---2015---Yair Antler

We modify the stable matching problem by allowing agents' preferences to depend on the endogenous actions of agents on the other side of the market. Conventional matching theory results break down in the modified setup. In particular, every game that is induced by a stable matching mechanism (e.g., the Gale-Shapley mechanism) may have equilibria that result in matchings that are not stable with respect to the agents' endogenous preferences. However, when the Gale-Shapley mechanism is slightly modified, every equilibrium of its induced game results in a pairwise stable matching with respect to the endogenous preferences as long as they satisfy a natural reciprocity property. (JEL C78, D82)

Selling Cookies

- American Economic Journal: Microeconomics---2015---Dirk Bergemann, Alessandro Bonatti

We propose a model of data provision and data pricing. A single data provider controls a large database that contains information about the match value between individual consumers and individual firms (advertisers). Advertisers seek to tailor their spending to the individual match value. The data provider prices queries about individual consumers' characteristics (cookies). We determine the equilibrium data acquisition and pricing policies. Advertisers choose positive and/or negative targeting policies. The optimal query price influences the composition of the targeted set. The price of data decreases with the reach of the database and increases with the fragmentation of data sales. (JEL C78, D83, L11, L82, M37)

Evolution of Impatience: The Example of the Farmer-Sheriff Game

- American Economic Journal: Microeconomics---2015---David Levine, Salvatore Modica, Federico Weinschelbaum, Felipe Zurita

The literature on the evolution of impatience, focusing on one-person decision problems, often finds that evolutionary forces favor the more patient individuals. This paper shows that in games where equilibrium involves threat of punishment there are forces generating an evolutionary advantage to the impatient. In particular, it offers a two-population example where evolutionary forces favor impatience in one group while favoring patience in the other. Moreover, efficiency may also favor impatient individuals. In our example, it is efficient for one population to evolve impatience and for the other to develop patience. Yet, evolutionary forces move the opposite direction. (JEL C73, C78)

Formal Contracts, Relational Contracts, and the Threat-Point Effect

- American Economic Journal: Microeconomics---2015---Hideshi Itoh, Hodaka Morita

We investigate whether formal contracts can help in resolving the holdup problem by studying repeated transactions between a seller and a buyer. Contrary to previous findings, we demonstrate that a simple fixed-price contract based on product delivery is of value even when relation-specific investment is purely cooperative. Furthermore, we show that focusing our attention on fixed-price contracts as a form of formal contracts is without loss of generality. The key driving force is a possibility that the relation-specific investment decreases the surplus under no trade. This possibility, although very plausible, has been largely ignored in previous analyses of the holdup problem (JEL C78, D23, D86)

When Is It Optimal to Delegate: The Theory of Fast-Track Authority

- American Economic Journal: Microeconomics---2015---Levent Celik, Bilgehan Karabay, John

McLaren

With fast-track authority (FTA), the US Congress delegates trade policy authority to the president by committing not to amend a trade agreement. Why would it cede such power? We suggest an interpretation in which Congress uses FTA to forestall destructive competition between its members for protectionist rents. In our model: (i) FTA is never granted if an industry operates in the majority of districts; (ii) The more symmetric the industrial pattern, the more likely is FTA, since competition for protectionist rents is most punishing when bargaining power is symmetrically distributed; (iii) Widely disparate initial tariffs prevent free trade even with FTA. (JEL C78, D72, F13, F14)

Quality Disclosure Programs and Internal Organizational Practices: Evidence from Airline Flight Delays

- American Economic Journal: Microeconomics---2015---Silke Forbes, Mara Lederman, Trevor Tombe

Disclosure programs exist in many industries in which consumers are poorly informed about product quality. We study a disclosure program for airline on-time performance, which ranks airlines based on the fraction of their flights that arrive less than 15 minutes late. The program creates incentives for airlines to focus their efforts on flights close to this threshold. We find that firms in this industry are heterogeneous in how they respond to these incentives. Moreover, this heterogeneity correlates with internal firm characteristics. Our findings highlight the importance of interactions between incentives created by a disclosure program and firms' internal organizational practices. (JEL D22, L15, L25, L93)

Formal versus Informal Monitoring in Teams

- American Economic Journal: Microeconomics---2015---Alex Gershkov, Eyal Winter

In this paper we analyze a principal's optimal monitoring strategies in a team environment. In doing so we study the interaction between formal monitoring

and informal (peer) monitoring. We show that if the technology satisfies complementarity, peer monitoring substitutes for the principal's monitoring. However, if the technology satisfies substitution, the principal's optimal monitoring is independent of the peer monitoring. We also show that if the technology satisfies complementarity, then the principal in the optimal contracts will monitor more closely than in the case of substitution. (JEL D23, D82, M54)

Becoming the Neighbor Bidder: Endogenous Winner's Curse in Dynamic Mechanisms

- American Economic Journal: Microeconomics---2015---Alejandro Francetich

This paper addresses the problem of sequentially allocating time sensitive goods, or one-period leases on a durable good, among agents who compete through time and learn about the common component of their valuation privately through experience. I show that efficiency is unattainable, and I identify simple variations of sequential second price or English auctions that implement the second best and the revenue-maximizing auctions. When the units are divisible, I identify the corresponding auctions that allow for double sourcing. (JEL D44, D82)

Testing Ambiguity Models through the Measurement of Probabilities for Gains and Losses

- American Economic Journal: Microeconomics---2015---Aurélien Baillon,Han Bleichrodt

This paper reports on two experiments that test the descriptive validity of ambiguity models using a natural source of uncertainty (the evolution of stock indices) and both gains and losses. We observed violations of probabilistic sophistication, violations that imply a fourfold pattern of ambiguity attitudes: ambiguity aversion for likely gains and unlikely losses and ambiguity seeking for unlikely gains and likely losses. Our data are most consistent with prospect theory and, to a lesser extent, ? -maxmin expected utility and Choquet expected utility. Models with uniform ambiguity

attitudes are inconsistent with most of the observed behavioral patterns. (JEL D81, D83, G11, G12, G14)

Loss Aversion and Consumption Choice: Theory and Experimental Evidence

- American Economic Journal: Microeconomics---2015---Heiko Karle,Georg Kirchsteiger,Martin Peitz

We analyze a consumer-choice model with price uncertainty, loss aversion, and expectation-based reference points. The implications of this model are tested in an experiment in which participants have to make a consumption choice between two sandwiches. Participants differ in their reported taste for the two sandwiches and in their degree of loss aversion, which we measure separately. We find that more-loss-averse participants are more likely to opt for the cheaper sandwich, in line with theoretical predictions. The estimates in the model with rational expectations are slightly more significant than those with naïve expectations. (JEL D11, D12, D84, M31)

Innovation, Trade, and Finance

- American Economic Journal: Microeconomics---2015---Peter Egger,Christian Keuschnigg

Heterogeneous firms invest in R&D and expansion investment. Venture capital specializes in R&D financing where problems are largest. Marginal firms get funded by venture capital, while firms with larger debt capacity obtain cheaper bank financing. In the latest stage, cash-rich firms invest at an optimal scale, while cash-poor firms are restricted. A country's financial and institutional development determines entry and expansion of firms and their comparative advantage in producing innovative goods. We illustrate how tariffs, R&D subsidies, institutional reform and venture capital improve access to capital, expand innovative industries, boost national welfare and may result in ambiguous international welfare spillovers. (JEL D21, F11, F13, G24, G32, O32)

Organizing to Adapt and Compete

- American Economic Journal: Microeconomics---2015---Ricardo Alonso,Wouter Dessein,Niko Matouschek

We examine the relationship between the organization of a multi-divisional firm and its ability to adapt production decisions to changes in the environment. We show that even if lower-level managers have superior information about local conditions, and incentive conflicts are negligible, a centralized organization can be better at adapting to local information than a decentralized one. As a result, and in contrast to what is commonly argued, an increase in product market competition that makes adaptation more important can favor centralization rather than decentralization. (JEL D21, D23, F23, L22)

Affiliation and Entry in First-Price Auctions with Heterogeneous Bidders: An Analysis of Merger Effects

- American Economic Journal: Microeconomics---2015---Tong Li,Bingyu Zhang

We study the effects of mergers in timber sale auctions in Oregon. We propose an entry and bidding model within the affiliated private value (APV) framework and with heterogeneous bidders, and establish existence of the entry equilibrium and existence and uniqueness of the bidding equilibrium when the joint distribution of private values belongs to the class of Archimedean copulas. We estimate the resulting structural model, and study merger effects through counterfactual analyses using the structural estimates. We evaluate how merger effects depend on affiliation, entry, and the auction mechanism and find that the seller may benefit from some mergers. (JEL C57, D44, G34, L11, L73)

Assessing Sale Strategies in Online Markets Using Matched Listings

- American Economic Journal: Microeconomics---2015---Liran Einav,Theresa Kuchler,Jonathan Levin,Neel Sundaresan

We use data from eBay to identify hundreds of thousands of instances in which retailers posted otherwise identical product listings with targeted variation in pricing and auction design. We use these matched listings to measure the dispersion in auction prices for identical goods sold by the same seller, to estimate nonparametric auction demand curves, to analyze the effect of buy it now options, and to assess consumer sensitivity to shipping fees. The scale of the data allows us to show that the estimates are robust to narrower criteria for matching listings, thereby addressing plausible concerns about endogeneity and selection biases. (JEL D44, L11, L81)

Grading Standards and Education Quality

- American Economic Journal: Microeconomics---2015---Raphael Boleslavsky,Christopher Cotton

We consider school competition in a Bayesian persuasion framework. Schools compete to place graduates by investing in education quality and by choosing grading policies. In equilibrium, schools strategically adopt grading policies that do not perfectly reveal graduate ability to evaluators. We compare outcomes when schools grade strategically to outcomes when evaluators perfectly observe graduate ability. With strategic grading, grades are less informative, and evaluators rely less on grades and more on a school's quality when assessing graduates. Consequently, under strategic grading, schools have greater incentive to invest in quality, and this can improve evaluator welfare. (JEL D82, I21, I23)

State Censorship

- American Economic Journal: Microeconomics---2015---Mehdi Shadmehr,Dan Bernhardt

We characterize a ruler's decision of whether to censor media reports that convey information to citizens who decide whether to revolt. We find: (i) a ruler gains (his ex ante expected payoff increases) by committing to censoring slightly less than he does in equilibrium: his equilibrium calculations ignore that censoring less causes citizens to update more positively following no

news; (ii) a ruler gains from higher censorship costs if and only if censorship costs exceed a critical threshold; (iii) a bad ruler prefers a very strong media to a very weak one, but a good ruler prefers the opposite. (JEL D72, D74, D83)

Preferences over Equality in the Presence of Costly Income Sorting

- American Economic Journal: Microeconomics---2015---Gilat Levy,Ronny Razin

We analyze preferences over redistribution in societies with costly (positive) sorting according to income. We identify a new motivation for redistribution, where individuals support taxation in order to reduce the incentives to sort. We characterize a simple condition over income distributions which implies that even relatively rich voters—with income above the mean—will prefer full equality (and thus no sorting) to societies with costly sorting. We show that the condition is satisfied for relatively equal income distributions. We also relate the condition to several statistical properties which are satisfied by a large family of distribution functions. (JEL D31, D63, H23)

Expanding "Choice" in School Choice

- American Economic Journal: Microeconomics--2015---Atilla Abdulkadiro?lu,Yeon-Koo Che,Yosuke Yasuda

Gale-Shapley's deferred acceptance (henceforth DA) mechanism has emerged as a prominent candidate for placing students to public schools. While DA has desirable fairness and incentive properties, it limits the applicants' abilities to communicate their preference intensities, which entails ex ante inefficiency when ties at school preferences are broken randomly. We propose a variant of deferred acceptance mechanism that allows students to influence how they are treated in ties. It inherits much of the desirable properties of DA but performs better in ex ante efficiency. (JEL D82, H75, I21, I28)

Sharp for SARP: Nonparametric Bounds on Counterfactual Demands

- American Economic Journal: Microeconomics---2015---Richard Blundell,Martin Browning,Laurens Cherchye,Ian Crawford,Bram De Rock,Frederic Vermeulen

Sharp nonparametric bounds are derived for counterfactual demands and Hicksian compensating and equivalent variations. These "i-bounds" refine and extend earlier results of Blundell, Browning, and Crawford (2008). We show that their bounds are sharp under the Weak Axiom of Revealed Preference (WARP) since they do not require transitivity. The new bounds are sharp under the Strong Axiom of Revealed Preference (SARP). By requiring transitivity they can be used to bound welfare measures. The new bounds on welfare measures are shown to be operationalized through algorithms that are easy to implement. (JEL D04, D11)

Harsanyi's Aggregation Theorem with Incomplete Preferences

- American Economic Journal: Microeconomics--2015---Eric Danan,Thibault Gajdos,Jean-Marc Tallon

We provide a generalization of Harsanyi's (1955) aggregation theorem to the case of incomplete preferences at the individual and social level. Individuals and society have possibly incomplete expected utility preferences that are represented by sets of expected utility functions. Under Pareto indifference, social preferences are represented through a set of aggregation rules that are utilitarian in a generalized sense. Strengthening Pareto indifference to Pareto preference provides a refinement of the representation. (JEL D01, D11, D71)

Distributional Preferences, Reciprocity-Like Behavior, and Efficiency in Bilateral Exchange

- American Economic Journal: Microeconomics---2015---Daniel Benjamin

Under what conditions do distributional preferences, such as altruism or a concern for fair outcomes, generate efficient trade? I analyze theoretically a simple bilateral exchange game: each player sequentially takes an action that reduces his own material payoff but increases the other player's. Each player's preferences may depend on both his/her own material payoff and the other player's. I identify two key properties of the second-mover's preferences: indifference curves kinked around "fair" material-payoff distributions, and materials payoffs entering preferences as "normal goods". Either property can drive reciprocity-like behavior and generate a Pareto efficient outcome. (JEL C78, D63, D64)

Subjective Evaluations: Discretionary Bonuses and Feedback Credibility

- American Economic Journal: Microeconomics---2015---William Fuchs

We provide a new rationale for the use of discretionary bonuses. In a setting with unknown match qualities between a worker and a firm and subjective evaluations by the principal, bonuses are useful in order to make the feedback from the firm to the workers credible. This way workers in good matches are less inclined to accept outside offers. (JEL D82, J33, M12, M52)

Optimal Design of Trade Agreements in the Presence of Renegotiation

- American Economic Journal: Microeconomics---2015---Giovanni Maggi, Robert Staiger

We study the optimal design of trade agreements when governments can renegotiate after the resolution of uncertainty but compensation between them is inefficient. In equilibrium, renegotiation always results in trade liberalization, not protection. The optimal contract may be a "property rule" or a "liability rule". High uncertainty favors liability over property rules, while asymmetries in bargaining power favor property over liability rules. Moreover, optimal property rules are never renegotiated. With a cost of renegotiation,

property rules are favored when this cost is higher, reversing a central conclusion of the law-and-economics literature. (JEL C78, D86, F13, F15, K12)

The Core Matchings of Markets with Transfers

- American Economic Journal: Microeconomics---2015---Christopher Chambers, Federico Echenique

We characterize the structure of the set of core matchings of an assignment game (a two-sided market with transfers). Such a set satisfies a property we call consistency. Consistency of a set of matchings states that, for any matching v , if, for each agent i there exists a matching \hat{v} in the set for which $\hat{v}(i) = v(i)$, then v is in the set. A set of matchings satisfies consistency if and only if there is an assignment game for which all elements of the set maximize the surplus. (JEL C78)

Information and Extremism in Elections

- American Economic Journal: Microeconomics---2015---Raphael Boleslavsky, Christopher Cotton

We model an election in which parties nominate candidates with observable policy preferences prior to a campaign that produces information about candidate quality, a characteristic independent of policy. Informative campaigns lead to greater differentiation in expected candidate quality, which undermines policy competition. In equilibrium, as campaigns become more informative, candidates become more extreme. We identify conditions under which the costs associated with extremism dominate the benefits of campaign information. Informative political campaigns increase political extremism and can decrease voter welfare. Our results have implications for media coverage, the number of debates, and campaign finance reform. (JEL D72, D83)

A Continuous-Time Model of Multilateral Bargaining

- American Economic Journal: Microeconomics---2015---Attila Ambrus, Shih En Lu

We propose a finite-horizon continuous-time framework for coalitional bargaining, in which players can make offers at random discrete times. In our model: (i) expected payoffs in Markov perfect equilibrium (MPE) are unique, generating sharp predictions and facilitating comparative statics; and (ii) MPE are the only subgame perfect Nash equilibria (SPNE) that can be approximated by SPNE of nearby discrete-time bargaining models. We investigate the limit MPE payoffs as the time horizon goes to infinity and players get infinitely patient. In convex games, we establish that the set of these limit payoffs achievable by varying recognition rates is exactly the core of the characteristic function. (JEL C78)

Repeated Interaction and Rating Inflation: A Model of Double Reputation

- American Economic Journal: Microeconomics---2015---Sivan Frenkel

Credit rating agencies have an incentive to maintain a public reputation for credibility among investors but also have an incentive to develop a second, private reputation for leniency among issuers. We show that in markets with few issuers, such as markets for structured assets, these incentives may lead rating agencies to inflate ratings as a strategic tool to form a "double reputation". The model extends the existing literature on "cheap-talk" reputation to the case of two audiences. Our results can explain why rating inflation occurred specifically in markets for MBSs and CDOs during the recent financial crisis. Policy implications are discussed. (JEL D82, G01, G12, G24, G32)

Mobility and Conflict

- American Economic Journal: Microeconomics---2015---Sourav Bhattacharya, Joyee Deb, Tapas Kundu

We study the role of intergroup mobility in the emergence of conflict. Two groups compete for the right to allocate society's resources. We allow for costly intergroup mobility. The winning group offers an allocation, which the opposition can accept or reject, and wage

conflict. Agents can also switch group membership. Expropriating a large share of resources increases political strength by attracting opposition members, but implies a higher threat of conflict. Our main finding is that the possibility of intergroup mobility affects the likelihood of conflict in a nonmonotonic way. Open conflict can arise at intermediate costs of mobility. (JEL D71, D72, D74)

Searching for a Bargain: Power of Strategic Commitment

- American Economic Journal: Microeconomics---2015---Selcuk Ozyurt

This paper shows that in a multilateral bargaining setting where the sellers compete à la Bertrand, a range of prices that includes the monopoly price and 0 are compatible with equilibrium, even in the limit where the reputational concerns and frictions vanish. In particular, the incentive of committing to a specific demand, the opportunity of building reputation about inflexibility, and the anxiety of preserving their reputation can tilt players' bargaining power in such a way that being deemed as a tough bargainer is bad for the competing players, and thus, price undercutting is not optimal for the sellers. (JEL C78, D43, D83)

Corrigendum: Pride and Diversity in Social Economies

- American Economic Journal: Microeconomics---2015---Fabio Maccheroni, Massimo Marinacci, Aldo Rustichini

Credit Market Speculation and the Cost of Capital

- American Economic Journal: Microeconomics---2014---Yeon-Koo Che, Rajiv Sethi

We examine the effect of speculation using credit derivatives on the cost of debt and the likelihood of default. The availability of credit default swaps induces investors who are optimistic about borrower revenues to sell protection instead of buying bonds. This benefits borrowers if protection can only be bought with an

insurable interest, but can increase the cost of debt and crowd out productive lending if protection can be purchased as a bet on default. We also show that the possibility of speculation on default may cause multiple equilibria and exacerbate the problem of rollover risk.

Effects of Mergers in Two-Sided Markets: The US Radio Industry

- American Economic Journal: Microeconomics---2014---Przemyslaw Jeziorski

This study examines mergers in two-sided markets using a structural supply-and-demand model that employs data from the 1996-2006 merger wave in the U.S. radio industry. In particular, it identifies the conflicting incentives for merged firms to exercise market power on both listener and advertiser sides of the market, and disaggregates the effects of mergers into changes in product variety and advertising quantity. Specifically, it finds 0.2% listener welfare increase (+0.3% from increased product variety, and -0.1% from decreased ad quantity) and 21% advertiser welfare decrease (-17% from changes in product variety, and -5% from decreased ad quantity).

Strategic Private Experimentation

- American Economic Journal: Microeconomics---2014---Mike Felgenhauer, Elisabeth Schulte

We present a model in which an agent takes actions to affect her reputation with two audiences with diverse preferences. This contrasts with standard reputation models that consider a homogeneous audience. A new aspect that arises is that different audiences may observe outcomes commonly or separately. We show that, if all audiences commonly observe outcomes, reputation concerns are necessarily efficient- the agent's per-period payoff in the long run is higher than in one-shot play. However, when audiences separately observe different outcomes, the result is the opposite. Therefore, the agent would prefer to deal with audiences commonly. If this is not possible, the second-best solution may be to forgo reputation with one audience and focus entirely on the other.

Internet Penetration and Capacity Utilization in the US Airline Industry

- American Economic Journal: Microeconomics---2014---James Dana, Eugene Orlov

Airline capacity utilization increased dramatically between 1993 and 2007, after staying fairly level following deregulation. We argue that consumers' use of the Internet to investigate and purchase airline tickets reduces market frictions and allows airlines to meet demand with less capacity and higher load factors. We find that differences in the rate of change of metropolitan area Internet penetration are positively correlated with differences in the rate of change of airlines' airport-pair load factors. Consistent with our explanation, this correlation is greater on flights in more competitive markets and on flights with fewer total passengers.

The Control Premium: A Preference for Payoff Autonomy

- American Economic Journal: Microeconomics---2014---David Owens, Zachary Grossman, Ryan Fackler

We document individuals' willingness to pay to control their own payoff. Experiment participants choose whether to bet on themselves or on a partner answering a quiz question correctly. Given participants' beliefs, which we elicit separately, expected-money maximizers would bet on themselves in 56.4 percent of the decisions. However, participants actually bet on themselves in 64.9 percent of their opportunities, reflecting an aggregate control premium. The average participant is willing to sacrifice 8 percent to 15 percent of expected asset-earnings to retain control. Thus, agents may incur costs to avoid delegating and studies inferring beliefs from choices may overestimate their results on overconfidence.

The Strategic Dis/advantage of Voting Early

- American Economic Journal: Microeconomics---2014---Eddie Dekel, Michele Piccione

Under sequential voting, voting late enables conditioning on which candidates are viable, while voting early can influence the field of candidates. But the latter effect can be harmful: shrinking the field increases not only the likelihood that future voters vote for one's favorite candidate, but also that they vote for an opponent. Specifically, if one's favorite candidate is significantly better than all others then early voting is disadvantageous and all equilibria are equivalent to simultaneous voting. Conversely, when some other candidate is almost as good then any Markov, symmetric, anonymous equilibrium involves sequential voting (and differs from simultaneous voting).

Hypothetical Thinking and Information Extraction in the Laboratory

- American Economic Journal: Microeconomics---2014---Ignacio Esponda, Emanuel Vespa

In several common-value environments (e.g., auctions or elections), players should make informational inferences from opponents' strategies under certain hypothetical events (e.g., winning the auction or being pivotal). We design a voting experiment that identifies whether subjects make these inferences and distinguishes between hypothetical thinking and information extraction. Depending on feedback, between 50 and 80 percent of subjects behave non-optimally. More importantly, these mistakes are driven by difficulty in extracting information from hypothetical, but not from actual, events. Mistakes are robust to experience and hints, and also arise in more general settings where players have no private information.

Voter Preferences, Polarization, and Electoral Policies

- American Economic Journal: Microeconomics---2014---Yuichiro Kamada, Fuhito Kojima

In most variants of the Hotelling-Downs model of election, it is assumed that voters have concave utility functions. This assumption is arguably justified in issues such as economic policies, but convex utilities are perhaps more appropriate in others such as moral

or religious issues. In this paper we analyze the implications of convex utility functions in a two-candidate probabilistic voting model with a polarized voter distribution. We show that the equilibrium policies diverge if and only if voters' utility function is sufficiently convex. If two or more issues are involved, policies converge in "concave issues" and diverge in "convex issues"

Pride and Diversity in Social Economies

- American Economic Journal: Microeconomics---2014---Fabio Maccheroni, Massimo Marinacci, Aldo Rustichini

We study a two-period economy in which agents preferences take into account their relative economic position. The study builds on a decision theoretic analysis of the social emotions that underlie these relative concerns. These emotions, envy and pride, respond to social losses and gains, respectively. Our main result is that envy leads to conformism in consumption behavior and pride to diversity. We thus establish a link between emotions that are object of study in psychology and neuroscience, and important features of economic variables, in the first place the equilibrium distribution of consumption and income.

Competitive Altruism, Mentalizing, and Signaling

- American Economic Journal: Microeconomics---2014---Ed Hopkins

One explanation of altruism is that it arises from "mentalizing", the process of understanding the mental states of others. Another is based on sexual selection: altruism is a costly signal of good genes. This paper shows that these two arguments are stronger together in that altruists who can mentalize have a greater advantage over non-altruists when they can signal their type, even though these signals are costly, when such signalling allows better matching opportunities. Finally, it is shown how mentalizing leads to higher payoffs for both partners in a long-term relationship, modeled as a repeated game with private monitoring.

(Good and Bad) Reputation for a Servant of Two Masters

- American Economic Journal: Microeconomics---2014---Heski Bar-Isaac, Joyee Deb

We present a model in which an agent takes actions to affect her reputation with two audiences with diverse preferences. This contrasts with standard reputation models that consider a homogeneous audience. A new aspect that arises is that different audiences may observe outcomes commonly or separately. We show that, if all audiences commonly observe outcomes, reputation concerns are necessarily efficient- the agent's per-period payoff in the long run is higher than in one-shot play. However, when audiences separately observe different outcomes, the result is the opposite. Therefore, the agent would prefer to deal with audiences commonly. If this is not possible, the second-best solution may be to forgo reputation with one audience and focus entirely on the other.

Wasteful Sanctions, Underperformance, and Endogenous Supervision

- American Economic Journal: Microeconomics---2014---David Miller, Kareen Rozen

We study optimal contracting in team settings where agents have many opportunities to shirk, task-level monitoring is needed to provide useful incentives, and it is difficult to write individual performance into formal contracts. Incentives are provided informally, using wasteful sanctions like guilt and shame, or slowed promotion. These features give rise to optimal contracts with under performance, forgiving sanctioning schemes, and endogenous supervision structures. Agents optimally take on more assigned tasks than they intend to complete, leading to the concentration of supervisory responsibility in the hands of one or two agents.

The Day Care Assignment: A Dynamic Matching Problem

- American Economic Journal: Microeconomics---2014---John Kennes, Daniel Monte, Norovsambuu Tumennasan

We study the problem of centralized allocation of children to public daycare centers, illustrated by the case of Denmark. Our framework applies to problems of dynamic matching in which there is entry and exit of agents over time; for example, the school choice problem once student mobility is taken into account. We show that there does not exist any mechanism that is both stable and strategy-proof. We also show that the well-known Top Trading Cycles mechanism is neither Pareto efficient nor strategy-proof. Finally, a mechanism in which parents sequentially choose menus of schools is both strategy-proof and Pareto efficient.

Mergers and Sunk Costs: An Application to the Ready-Mix Concrete Industry

- American Economic Journal: Microeconomics---2014---Allan Collard-Wexler

Horizontal mergers have a large impact by inducing a long-lasting change in market structure. Only in an industry with substantial entry barriers is a merger not immediately counteracted by post-merger entry. To evaluate the duration of the effects of a merger, I use the model of Abbring and Campbell (2010) to estimate demand thresholds for entry and for exit. These thresholds, along with the process for demand, are estimated using data from the ready-mix concrete industry. Simulations predict that a merger from duopoly to monopoly generates between 9 and 10 years of monopoly in the market.

Nonlinear Pricing of Storable Goods

- American Economic Journal: Microeconomics---2014---Igal Hendel, Alessandro Lizzeri, Nikita Roketskiy

This paper develops a model of nonlinear pricing of storable goods. We show that storability imposes novel constraints on a monopolist's ability to extract surplus. We then show that the attempt to relax these constraints can generate cyclical patterns in pricing and sales, even when consumers are homogeneous. Thus, the model provides a novel explanation for sales that

does not rely on discriminating heterogeneous consumers. Enriching the model to allow for buyer heterogeneity in storage technology, delivers the prediction that larger bundles are more likely to be on sale.

Competitive Framing

- American Economic Journal: Microeconomics---2014---Ran Spiegler

I present a simple framework for modeling two-firm market competition when consumer choice is "frame-dependent", and firms use costless "marketing messages" to influence the consumer's frame. This framework embeds several recent models in the "behavioral industrial organization" literature. I identify a property that consumer choice may satisfy, which extends the concept of Weighted Regularity due to Piccione and Spiegler (2012), and provide a characterization of Nash equilibria under this property. I use this result to analyze the equilibrium interplay between competition and framing in a variety of applications.

Asymmetric Contests with Head Starts and Nonmonotonic Costs

- American Economic Journal: Microeconomics---2014---Ron Siegel

This paper studies equilibrium behavior in a class of games that models asymmetric multiprize competitions in which players' costs need not be strictly increasing in their performance. Such costs accommodate various types of asymmetries, including head starts. Head starts capture incumbency advantages, prior investments, and technological differences. I provide an algorithm that constructs the unique equilibrium in which players do not choose weakly-dominated strategies, and apply it to study multiprize all-pay auctions with head starts. A comparison to the standard all-pay auction shows that the strategic effects of head starts differ substantially from those of differing valuations.

Vertical Bargaining and Countervailing Power

- American Economic Journal: Microeconomics---2014---Alberto Iozzi, Tommaso Valletti

We study a set of bilateral Nash bargaining problems between an upstream input supplier and several differentiated but competing retailers. If one bilateral bargain fails, the supplier can sell to the other retailers. We show that, in a disagreement, the other retailers' behavior has a dramatic impact on the supplier's outside options and, therefore, on input prices and welfare. We revisit the countervailing buyer power hypothesis and obtain results in stark contrast with previous findings, depending on the type of outside option. Our results apply, more generally, to the literature that incorporates negotiated input prices using bilateral Nash bargaining.

Local Institutions and the Dynamics of Community Sorting

- American Economic Journal: Microeconomics---2014---Andrea Robbett

This paper studies the dynamics by which populations with heterogeneous preferences for public good provision sort themselves into communities. I conduct laboratory experiments to consider which institutions best facilitate efficient self-organization when residents can move freely between locations. I find that institutions requiring all residents of a community to pay equal taxes enable subjects to sort into stable, homogeneous communities. Though sorted, residents often fail to attain the provision level best suited for them. When residents can vote for local tax policies with ballots, along with their feet, each community converges to the most efficient outcome for its population.

Selection into Trade and Wage Inequality

- American Economic Journal: Microeconomics---2014---Thomas Sampson

This paper analyzes how intra-industry trade affects the wage distribution when both workers and firms are heterogeneous. Positive assortative matching between worker skill and firm technology generates an employer size-wage premium and an exporter wage premium. Fixed export costs cause the selection of advanced technology, high skill firms into exporting

and trade shifts the firm technology distribution upwards. Consequently, trade increases skill demand and wage inequality in all countries, both on aggregate and within the upper tail of the wage distribution. This holds when firms receive random technology draws and when technology depends on firm level R&D.

An Economic Theory of the Evolutionary Emergence of Property Rights

- American Economic Journal: Microeconomics---2014---Mukesh Eswaran,Hugh M. Neary

We model the emergence of an innate, biological sense of property rights where resource scarcity and output contestability reign. Preferences evolve such that, in evolutionarily stable equilibrium, an object is valued more by an individual who possesses it, or has produced it, than if he is neither possessor nor producer. In a distributional contest for the object, the possessor/producer will devote more effort to retaining it than an interloper will to expropriating it. Asymmetry in preferences for an object between possessor/producer and interloper, and consequent asymmetry of efforts defending or expropriating it, constitute our concept of innate property rights.

Optimal Project Selection Mechanisms

- American Economic Journal: Microeconomics---2014---Talía Bar,Sidarthá Gordon

We study mechanisms for selecting up to m out of n projects. Project managers' private information on quality is elicited through transfers. Under limited liability, the optimal mechanism selects projects that maximize some function of the project's observable and reported characteristics. When all reported qualities exceed their own project-specific thresholds, the selected set only depends on observable characteristics, not reported qualities. Each threshold is related to (i) the outside option level at which the cost and benefit of eliciting information on the project cancel out and (ii) the optimal value of selecting one among infinitely many ex ante identical projects.

Resisting Moral Wiggle Room: How Robust Is Reciprocal Behavior?

- American Economic Journal: Microeconomics---2014---Jo?l J. van der Weele,Julija Kulisa,Michael Kosfeld,Guido Friebe

We provide the second mover in a trust game and a moonlighting game with an excuse for not reciprocating. While this type of manipulation has been shown to strongly reduce giving in the dictator game, we find that the availability of the excuse has no effect on the incidence of reciprocal behavior in these games. Our results cast doubt on the generalizability of previous dictator game findings and suggest that image concerns are not a key driver of reciprocal behavior.

Sequential Kidney Exchange

- American Economic Journal: Microeconomics---2014---Lawrence M. Ausubel,Thayer Morrill

The traditional literature on kidney exchange assumes that all components of the exchange must occur simultaneously. Unfortunately, the number of operating rooms required for concurrent surgeries poses a significant constraint on the beneficial exchanges that may be attained. The basic insight of this paper is that incentive compatibility does not require simultaneous exchange; rather, it requires that organ donation occurs no later than the associated organ receipt. Using sequential exchanges may relax the operating-room constraint and thereby increase the number of beneficial exchanges. We show that most benefits of sequential exchange can be accomplished with only two concurrent operating rooms.

Neural Activity Reveals Preferences without Choices

- American Economic Journal: Microeconomics---2014---Alec Smith,B. Douglas Bernheim,Colin F. Camerer,Antonio Rangel

We investigate the feasibility of inferring the choices people would make (if given the opportunity) based on their neural responses to the pertinent prospects when

they are not engaged in actual decision making. The ability to make such inferences is of potential value when choice data are unavailable, or limited in ways that render standard methods of estimating choice mappings problematic. We formulate prediction models relating choices to "nonchoice" neural responses, and use them to predict out-of-sample choices for new items and for new groups of individuals. The predictions are sufficiently accurate to establish the feasibility of our approach.

Information Acquisition in a War of Attrition

- American Economic Journal: Microeconomics---2014---Kyungmin Kim,Frances Zhiyun Xu Lee

We consider a war of attrition where the players can learn about a state that determines their payoffs at stochastic deadline. We study how the incentives to acquire information depend on the (un)verifiability of information and its implications for efficiency. Unverifiability creates distortions (strategic delay in concession or duplication in information acquisition), but encourages information acquisition. In our model, provided that the information acquisition cost is small, these two effects cancel each other out and the players' expected payoffs in symmetric equilibrium are identical whether information is verifiable or not. We also show that shortening deadlines may prolong the conflict.

Inefficiency Measurement

- American Economic Journal: Microeconomics---2014---Christopher Chambers,Alan Miller

We introduce an ordinal model of efficiency measurement. Our primitive is a notion of efficiency that is comparative, but not cardinal or absolute. In this framework, we postulate axioms that an ordinal efficiency measure should satisfy. Primary among these are choice consistency and planning consistency, which guide the measurement of efficiency in a firm with access to multiple technologies. Other axioms include scale invariance, strong monotonicity, and a continuity condition. These axioms characterize a family of path-based measures. By replacing the continuity condition

with symmetry, we obtain the coefficient of resource utilization.

Vendettas

- American Economic Journal: Microeconomics---2014---Friedel Bolle,Jonathan Tan,Daniel Zizzo

Vendettas occur in many real-world settings where rivals compete for a prize, e.g., winning a competitive promotion or retaining a job, by engaging in aggressive, retaliatory behavior. We present a benchmark experiment where two players have an initial probability of winning a prize. Retaliatory vendettas occur and lead subjects to the worst possible outcomes in 2/3 of cases, counter to self-interest predictions, with large inefficiencies even in the absence of any immediate gain from aggression. Negative emotions are important and interact with the economic setting to produce large social inefficiencies. Allowing cooling off periods reduces aggression.

When Is a Risky Asset "Urgently Needed"?

- American Economic Journal: Microeconomics---2014---Felix Kubler,Larry Selden,Xiao Wei

Risk free asset demand in the classic portfolio problem is shown to decrease with income if and only if the consumer's uncertainty preferences over assets satisfy the preference condition that the risk free asset is more readily substituted for the risky asset as the quantity of the latter increases. In this case, the risky asset is said to be "urgently needed" following the terminology of the classic certainty analysis of Johnson (1913). The urgently needed property tends to be more readily satisfied in uncertainty versus certainty settings. Asset pricing implications of this property are provided.

Delay and Deadlines: Freeriding and Information Revelation in Partnerships

- American Economic Journal: Microeconomics---2014---Arthur Campbell,Florian Ederer,Johannes Spinnewijn

We study two sources of delay in teams: freeriding and lack of communication. Partners contribute to the value of a common project, but have private information about the success of their own efforts. When the deadline is far away, unsuccessful partners freeride on each others' efforts. When the deadline draws close, successful partners stop revealing their success to maintain their partners' motivation. We derive comparative statics results for common team performance measures and find that the optimal deadline maximizes productive efforts while avoiding unnecessary delays. Welfare is higher when information is only privately observable rather than revealed to the partnership.

Candidates, Character, and Corruption

- American Economic Journal: Microeconomics---2014---B. Douglas Bernheim, Navin Kartik

We study the characteristics of self-selected candidates in corrupt political systems. Individuals differ along two dimensions of unobservable character: public spirit (altruism) and honesty (disutility from selling out to special interests). Both aspects combine to determine an individual's quality as governor. We characterize properties of equilibrium candidate pools for arbitrary costs of running for office, including when costs become vanishingly small. We explore how policy instruments such as the governor's compensation and anticorruption enforcement affect the expected quality of governance through candidate self-selection. We show that self-selection can have surprising implications for the effect of information disclosures concerning candidates' backgrounds.

Communication, Renegotiation, and the Scope for Collusion

- American Economic Journal: Microeconomics---2014---David J. Cooper, Kai-Uwe Kuhn

We study the effect of communication in an experimental game where cooperation is consistent with equilibrium play if players share an understanding that cheating will be punished. Consistent with communication acting as a coordinating device, credible preplay

threats to punish cheating are the most effective message to facilitate collusion. Promises to collude also improve cooperation. Credible threats do not occur in a treatment with a limited message space that permits threats of punishment. Contrary to some theoretical predictions, renegotiation possibilities facilitate collusion.

At Least Do No Harm: The Use of Scarce Data

- American Economic Journal: Microeconomics---2014---Alvaro Sandroni

When data is scarce, it is difficult to screen the opinions of informed and uninformed experts. In spite of this difficulty it is possible to deliver incentives for informed experts to honestly reveal their views, and for uninformed experts to do no harm to a principal in the sense that uninformed experts report the view the principal held originally (i.e., without the expert's report). This follows even if there is only a single data point to evaluate the expert's opinions and the expert's preferences over risk are unknown.

Extension Rules or What Would the Sage Do?

- American Economic Journal: Microeconomics---2014---Ehud Lehrer, Roei Teper

Quite often, decision makers face choices that involve new aspects and alternatives never considered before. Scenarios of this sort may arise, for instance, as a result of technological progress or from individual circumstances such as growing awareness. In such situations, simple inference rules, past experience, and knowledge about historic choice problems may prove helpful in determining what would be a reasonable action to take vis-a-vis a new problem. In the context of decision making under uncertainty, we introduce and study an extension rule that enables the decision maker to extend a preference order defined on a restricted domain.

Pooling with Essential and Nonessential Patents

- American Economic Journal: Microeconomics---2014---Daniel Quint

Several recent technological standards were accompanied by patent pools?arrangements to license relevant intellectual property as a package. A key distinction made by regulators?between patents essential to a standard and patents with substitutes?has not been addressed in the theoretical literature. I show that pools of essential patents are always welfare increasing, while pools which include nonessential patents can be welfare reducing?even pools limited to complementary patents and stable under compulsory individual licensing. If pools gain commitment power and price as Stackelberg leaders, this reduces, and can reverse, the gains from welfare increasing pools.

Risk-Taking and Risk-Sharing Incentives under Moral Hazard

- American Economic Journal: Microeconomics---2014---Mohamed Belhaj,Renaud Bourlès,Frédéric Deroian,Renaud Bourlès

This paper explores the effect of moral hazard on both risk-taking and informal risk-sharing incentives. Two agents invest in their own project, each choosing a level of risk and effort, and share risk through transfers. This can correspond to farmers in developing countries, who share risk and decide individually upon the adoption of a risky technology. The paper mainly shows that the impact of moral hazard on risk crucially depends on the observability of investment risk, whereas the impact on transfers is much more utility dependent.

Detection, Identification, and Estimation of Loss Aversion: Evidence from an Auction Experiment

- American Economic Journal: Microeconomics---2014---A. Banerji,Neha Gupta

We provide a novel experimental auction design, in which (i) an exogenous decrease in the probability of winning, conditional on the bid, reduces the optimal bid of a loss averse agent whose reference point is expectations based; (ii) observed bid distributions uniquely identify the participants' latent value distribution and loss-aversion parameter. Experimental evidence affirms the presence of such reference points. We show

that at the estimated magnitudes of loss aversion, (a) conventional Becker, DeGroot, and Marschak (1964) experiments may lead to large biases in estimated willingness to pay (which our design can correct for); and (b) first-price auctions may fetch moderately higher revenue, compared with second-price auctions.

Overconfidence and Diversification

- American Economic Journal: Microeconomics---2014---Yuval Heller

Experimental evidence suggests that people tend to be overconfident in the sense that they overestimate the accuracy of their private information. In this paper, we show that risk-averse principals might prefer overconfident agents in various strategic interactions because these agents help diversify the aggregate risk. This may help understanding why successful analysts and entrepreneurs tend to be overconfident. In addition, a different interpretation of the model presents a novel evolutionary foundation for overconfidence, and explains various stylized facts about this bias.

On the Political Economy of Urban Growth: Homeownership versus Affordability

- American Economic Journal: Microeconomics---2014---François Ortalo-Magné,Andrea Prat

We study the equilibrium properties of an overlapping-generation economy where agents choose where to locate and how much housing to own, and city residents vote on the number of new building permits every period. Undersupply of housing persists in equilibrium under conditions we characterize. City residents invest in housing because they expect their investment to be protected by a majority opposed to urban growth. They vote against growth because they have invested in local housing. This vicious cycle between ownership and urban growth generates a tension between the common housing policy objectives of affordability for all and homeownership for most.

Coalition Formation in a Legislative Voting Game

- American Economic Journal: Microeconomics---2014---Nels Christiansen,Sotiris Georganas,John Kagel

We experimentally investigate the Jackson and Moselle (2002) model where legislators bargain over policy proposals and the allocation of private goods. Key comparative static predictions of the model hold with the introduction of private goods, including "strange bedfellow" coalitions. Private goods help to secure legislative compromise and increase the likelihood of proposals passing, an outcome not predicted by the theory but a staple of the applied political economy literature. Coalition formation is better characterized by an "efficient equal split" between coalition partners than the subgame perfect equilibrium prediction, which has implications for stable political party formation.

Optimal Tax and Expenditure Policy with Aggregate Uncertainty

- American Economic Journal: Microeconomics---2014---Felix J. Bierbrauer

We study optimal income taxation and public-goods provision under the assumption that the cross-section distributions of productive abilities or public-goods preferences are not known a priori. A conventional Mirrleesian treatment is shown to provoke manipulations of the policy mechanism by individuals with similar interests. The analysis therefore incorporates a requirement of coalition-proofness. The main result is that increased public-goods provision is associated with a more distortionary and a more redistributive tax system. With a conventional Mirrleesian treatment, the level of public-goods provision is not related to how distortionary or redistributive the tax system is.

House Allocation with Overlapping Generations

- American Economic Journal: Microeconomics---2014---Morimitsu Kurino

Many real-life applications of house allocation problems are dynamic. For example, each year college freshmen

move in and seniors move out of on-campus housing. Each student stays on campus for only a few years. A student is a "newcomer" in the beginning and then becomes an "existing tenant". Motivated by this observation, we introduce a model of house allocation with overlapping generations. In terms of a dynamic rule without monetary transfers, we examine two static rules of serial dictatorship and top trading cycles. We support these seniority-based rules in terms of their dynamic Pareto efficiency and incentive compatibility

The Coordination Value of Monetary Exchange: Experimental Evidence

- American Economic Journal: Microeconomics---2014---Gabriele Camera,Marco Casari

What institutions can sustain cooperation in groups of strangers? Here we study the role of monetary systems. In an experiment, subjects sometimes needed help and sometimes could incur a cost to help an anonymous counterpart. In the absence of money, the intertemporal exchange of help, which could be supported by a norm of community punishment of defectors, did not emerge. Introducing intrinsically worthless tokens substantially altered patterns of behavior. Monetary trade emerged, which increased predictability of play and promoted cooperation when strangers could trade help for a token.

Financing Experimentation

- American Economic Journal: Microeconomics---2014---Mikhail Drugov,Rocco Macchiavello

Entrepreneurs must experiment to learn how good they are at a new activity. What happens when the experimentation is financed by a lender? Under common scenarios, i.e., when there is the opportunity to learn by "starting small" or when "noncompete" clauses cannot be enforced ex post, we show that financing experimentation can become harder precisely when it is more profitable, i.e., for lower values of the known arm and for more optimistic priors. Endogenous collateral requirements (like those frequently observed

in microcredit schemes) are shown to be part of the optimal contract.

Demand Estimation under Incomplete Product Availability

- American Economic Journal: Microeconomics---2013---Christopher Conlon, Julie Mortimer

Incomplete product availability is an important feature of many markets, and ignoring changes in availability may bias demand estimates. We study a new dataset from a wireless inventory system on vending machines to track product availability every four hours. The data allow us to account for product availability when estimating demand, and provide valuable variation for identifying substitution patterns when products stock out. We develop a procedure that allows for changes in product availability when availability is only observed periodically. We find significant differences in demand estimates: the corrected model predicts significantly larger impacts of stock-out events on profitability.

Strategic Tournaments

- American Economic Journal: Microeconomics---2013---Ayala Arad, Ariel Rubinstein

A strategic (round-robin) tournament is a simultaneous n-player game built on top of a symmetric two-player game G . Each player chooses one action in G and is matched to play G against all other players. The winner of the tournament is the player who achieves the highest total G -payoff. The tournament has several interpretations as an evolutionary model, as a model of social interaction, and as a model of competition between firms with procedurally rational consumers. We prove some general properties of the model and explore the intuition that a tournament encourages riskier behavior

Optimal Contract under Moral Hazard with Soft Information

- American Economic Journal: Microeconomics---2013---Guillaume Roger

I study a model of moral hazard with soft information: the agent alone observes the stochastic outcome of her action; hence the principal faces a problem of ex post adverse selection. With limited instruments the principal cannot solve these two problems independently; the ex post incentive for misreporting interacts with the ex ante incentives for effort. This affects the shape and properties of the optimal contract, which fails to elicit truthful revelation in all states. In this setup audit and transfer become strategic complements; this is rooted in the nonseparability of the problem.

Middlemen Margins and Globalization

- American Economic Journal: Microeconomics---2013---Pranab Bardhan, Dilip Mookherjee, Masatoshi Tsumagari

We study a competitive theory of middlemen with brand-name reputations necessary to overcome product quality moral hazard problems. Agents with heterogeneous abilities sort into different sectors and occupations. Middleman margins do not equalize across sectors if production of different goods are differentially prone to moral hazard, generating endogenous mobility barriers. We embed the model in a setting of North-South trade, and explore the distributive implications of trade liberalization. With large intersectoral moral hazard differences, results similar to those of Ricardo-Viner specific-factor models obtain, whereby southern inequality increases. Otherwise, opposite (i.e., Stolper-Samuelson) results obtain.

Incentive-Compatible Matching Mechanisms: Consistency with Various Stability Notions

- American Economic Journal: Microeconomics---2013---M. Bumin Yenmez

I study the consistency of incentive compatibility with several stability notions for a one-to-one matching market with transfers. Ex post stability, studied in the matching literature, is too strong to be satisfied together with incentive compatibility. Therefore, I introduce weaker stability notions: ex ante stability and

interim stability. Although ex ante stability is consistent with incentive compatibility when agents are ex ante identical or when the market is balanced, interim stability can only be satisfied when there is one agent on the short side of the market, as in auctions. Which stability is appropriate depends on when agents can block.

A Procurement Auction for Toxic Assets with Asymmetric Information

- American Economic Journal: Microeconomics---2013---Olivier Armantier, Charles Holt, Charles Plott

The proposed 2008 TARP auction was intended to remove "toxic" assets from portfolios of financially stressed banks. The Treasury selected a design whereby bids to sell different securities would be normalized by "reference prices" that reflect relative value estimates. We conduct a series of experiments indicating that a simple Reference Price Auction can be an effective mechanism for avoiding serious effects of adverse selection and strategic bid manipulation, even with inaccurate reference prices. Beyond the TARP auction, our results are relevant to various multi-object auctions with value heterogeneity.

Equilibrium Bids in Sponsored Search Auctions: Theory and Evidence

- American Economic Journal: Microeconomics---2013---Tilman B?rgers, Ingemar Cox, Martin Pendorfer, Vaclav Petricek

This paper presents a game theoretic analysis of the generalized second-price auction that the company Overture operated in 2004 to sell sponsored search listings on search engines. We construct a model that embodies few prior assumptions about parameters, and we present results that indicate that this model has under quite general assumptions a multiplicity of Nash equilibria. We then analyze bid data assuming that advertisers choose Nash equilibrium bids. We offer preliminary conclusions about advertisers' true willingness to bid for sponsored search listings. We find that

advertisers' true willingness to bid is multi-dimensional and decreasing in listing position.

The First-Order Approach to Merger Analysis

- American Economic Journal: Microeconomics---2013---Sonia Jaffe, E. Glen Weyl

Using information local to the premerger equilibrium, we derive approximations of the expected changes in prices and welfare generated by a merger. We extend the pricing pressure approach of recent work to allow for non-Bertrand conduct, adjusting the diversion ratio and incorporating the change in anticipated accommodation. To convert pricing pressures into quantitative estimates of price changes, we multiply them by the merger pass-through matrix, which (under conditions we specify) is approximated by the premerger rate at which cost increases are passed through to prices. Weighting the price changes by quantities gives the change in consumer surplus.

Bargaining with Deadlines and Private Information

- American Economic Journal: Microeconomics---2013---William Fuchs, Andrzej Skrzypacz

We study dynamic bargaining with private information and a deadline. As commitment power disappears, there is a clear "deadline effect." That is, trade takes place smoothly before the deadline and with an atom right at the deadline. Prices, timing of trade, and the deadline effect respond to the consequences of not reaching an agreement. Bleaker disagreement options lead to more trade and proportionally more of the agreements taking place on the verge of the deadline. Time to deadline can affect the overall efficiency of the equilibrium nonmonotonically. For intermediate deadlines, efficiency is improved if agents face bleaker prospects after deadline.

On the Efficiency of Codeshare Contracts between Airlines: Is Double Marginalization Eliminated?

- American Economic Journal: Microeconomics---2013---Philip Gayle

Previous research has suggested that codeshare agreements eliminate double marginalization that exists when unaffiliated airlines independently determine the price for different segments of an interline trip. Using a structural econometric model, this paper investigates whether codeshare contracts do eliminate double marginalization. The results suggest that both upstream and downstream margins persist when the operating carrier of a codeshare product also offers competing single-carrier product(s) in the concerned market. Furthermore, counterfactual simulations from the model suggest that efficient pricing of these codeshare products would lower their price, and yield nontrivial increases in consumer welfare.

Detecting Learning by Exporting

- American Economic Journal: Microeconomics---2013---Jan De Loecker

Learning by exporting refers to the mechanism whereby a firm's performance improves after entering export markets. This mechanism is often mentioned in policy documents, but many econometric studies have not found corroborating evidence. I show that the econometric methods rely on an assumption that productivity evolves exogenously. I show how to accommodate endogenous productivity processes such as learning by exporting. I discuss the bias introduced by ignoring such a process, and show that adjusting for it can lead to different conclusions. Using micro data from Slovenia I find evidence of substantial productivity gains from entering export markets.

Platform Competition under Asymmetric Information

- American Economic Journal: Microeconomics---2013---Hanna Halaburda, Yaron Yehezkel

We consider platform competition in a two-sided market, where the two sides (buyers and sellers) have ex-ante uncertainty and ex-post asymmetric information concerning the value of a new technology. We find that platform competition may lead to a market failure: competition may result in a lower level of trade and lower welfare than a monopoly, if the difference in the degree of asymmetric information between the two sides is below a certain threshold. Multi-homing solves the market failure resulting from asymmetric information. However, if platforms can impose exclusive dealing, then they will do so, which results in market inefficiency.

Homophily in Peer Groups

- American Economic Journal: Microeconomics---2013---Mariagiovanna Baccara, Leeat Yariv

The focus of this paper is the endogenous formation of peer groups. In our model agents choose peers before making contributions to public projects, and they differ in how much they value one project relative to another. Thus, the group's preference composition affects the type of contributions made. We characterize stable groups and find that they must be sufficiently homogeneous. We also provide conditions for some heterogeneity to persist as the group size grows large. In an application in which the projects entail information collection and sharing within the group, stability requires more similarity among extremists than among moderate individuals.

Collusion with Asymmetric Retailers: Evidence from a Gasoline Price-Fixing Case

- American Economic Journal: Microeconomics---2013---Robert Clark, Jean-François Houde

We point out a fundamental difficulty of successfully colluding in retail markets with heterogeneous firms, and characterize the mechanism recent gasoline cartels in Canada used to sustain collusion. Heterogeneity in cost and network size necessitates arrangements whereby participants split the market unequally to favor stronger players. We characterize empirically

the strategy and transfer mechanism using court documents containing summaries and extracts of conversations between participants. The mechanism implements transfers based on adjustment delays during price changes. We estimate that these delays can translate into substantial transfers and provide examples in which they can substantially reduce deviation frequency.

Contracts for Agents with Biased Beliefs: Some Theory and an Experiment

- American Economic Journal: Microeconomics---2013---Anja Sautmann

This paper experimentally tests the predictions of a principal-agent model in which the agent has biased beliefs about his ability. Overconfident workers are found to earn lower wages than underconfident ones because they overestimate their expected payoff, and principals adjust their offers accordingly. Moreover, the profit-maximizing contract distorts effort by varying incentives according to self-confidence, although only the most successful principals use this strategy. These findings have implications for the labor market; in particular, self-confidence is often correlated with gender, implying that principals would prefer to hire men over women simply because they are more overconfident.

Too Far Away? The Effect of Distance to Headquarters on Business Establishment Performance

- American Economic Journal: Microeconomics---2013---Arturs Kalnins, Francine Lafontaine

In the population of over 1.7 million Texan sales-tax collecting business establishments, we show that greater distance to owner headquarters is associated with shorter establishment longevity. For the lodging industry, where we have revenue data, increases in distance to headquarters due to HQ-moving owners or acquisitions are associated with reductions in revenues per room. We argue that this detrimental distance effect is robust and causal, arising even when

we control for the potential endogeneity of HQ distance using instrumental variable and matched pair analyses. We interpret this as evidence of monitoring and local information asymmetry problems for distant owners.

Behavioral Welfare Economics and Redistribution

- American Economic Journal: Microeconomics---2013---Marc Fleurbaey, Erik Schokkaert

Behavioral economics has shaken the view that individuals have well-defined, consistent and stable preferences. This raises a challenge for welfare economics, which takes as a key postulate that individual preferences should be respected. We argue, in agreement with Bernheim (2009) and Bernheim and Rangel (2009) that behavioral economics is compatible with consistency of partial preferences, and explore how the Bernheim-Rangel approach can be extended to deal with distributive issues. We revisit some key results of the theory in a framework with partial preferences and show how one can derive partial orderings of individual and social situations.

Pricing Payment Cards

- American Economic Journal: Microeconomics---2013---Özlem Bedre-Defolie, Emilio Calvano, Özlem Bedre Defolie

Payment card networks, such as Visa, require merchants' banks to pay substantial "interchange" fees to cardholders' banks, on a per transaction basis. This paper shows that a network's profit-maximizing fee induces an inefficient price structure, over-subsidizing card usage and over-taxing merchants. We show that this distortion is systematic and arises from the fact that consumers make two distinct decisions (membership and usage) whereas merchants make only one (membership). In general, we contribute to the theory of two-sided markets by introducing a model that distinguishes between extensive and intensive margins, thereby explaining why two-part tariffs are useful pricing tools for platforms.

Strategic Immunization and Group Structure

- American Economic Journal: Microeconomics---2013---Andrea Galeotti,Brian Rogers

We consider the spread of a harmful state through a population divided into two groups. Interaction patterns capture the full spectrum of assortativity possibilities. We show that a central planner who aims for eradication optimally either divides equally the resources across groups, or concentrates entirely on one group, depending on whether there is positive or negative assortativity, respectively. We study a game in which agents can, at a cost, immunize. Negative assortative interactions generate highly asymmetric equilibrium outcomes between ex ante identical groups. When groups have an underlying difference, even a small amount of intergroup contact generates large asymmetries. (JEL D71, D85)

Marry for What? Caste and Mate Selection in Modern India

- American Economic Journal: Microeconomics--2013---Abhijit Banerjee,Esther Duflo,Maitreesh Ghatak,Jeanne Lafortune

This paper analyzes how preferences for a noneconomic characteristic (e.g., caste) can affect equilibrium patterns of matching, and empirically evaluates this in the context of middle-class Indian arranged marriages. We show theoretically how the equilibrium consequences of caste depend on whether preferences are towards one's own group or for "marrying up." We then estimate actual preferences for caste and other attributes using a unique dataset of individuals who placed matrimonial advertisements and find only a strong preference for in-caste marriage. This translates, in equilibrium, in caste doing little to alter the matching patterns on non-caste attributes. (JEL C78, J12, O15, O17, Z13)

Why People Vote: Ethical Motives and Social Incentives

- American Economic Journal: Microeconomics---2013---S. Nageeb Ali,Charles Lin

Some individuals vote because they are motivated by a civic duty to do so, whereas others may vote because they wish to appear prosocial to others. This paper proposes a simple framework that captures these motivations, and provides results consistent with findings on turnout, e.g., that turnout is responsive to the expected closeness and importance of an election, to the observability of one's choice to vote, and to social rewards and punishments associated with voting. We study various extensions of this framework in which community monitoring plays a role, and explore the implications that voter mobilization has for electoral competition. (JEL D03, D72)

Preference Signaling in Matching Markets

- American Economic Journal: Microeconomics--2013---Peter Coles,Alexey Kushnir,Muriel Niederle

Many labor markets share three stylized facts: employers cannot give full attention to all candidates, candidates are ready to provide information about their preferences for particular employers, and employers value and are prepared to act on this information. In this paper we study how a signaling mechanism, where each worker can send a signal of interest to one employer, facilitates matches in such markets. We find that introducing a signaling mechanism increases the welfare of workers and the number of matches, while the change in firm welfare is ambiguous. A signaling mechanism adds the most value for balanced markets. (JEL C78)

Testing for Factor Price Equality with Unobserved Differences in Factor Quality or Productivity

- American Economic Journal: Microeconomics--2013---Andrew Bernard,Stephen Redding,Peter Schott

We develop a method for identifying departures from relative factor price equality that is robust to unobserved variation in factor productivity. We implement this method using data on the relative wage bills of

nonproduction and production workers across 170 local labor markets comprising the continental United States for 1972, 1992, and 2007. We find evidence of statistically significant differences in relative wages in all three years. These differences increase in magnitude over time and are related to industry structure in a manner that is consistent with neoclassical models of production. (JEL J31, J61, R23)

Assignment of Arrival Slots

- American Economic Journal: Microeconomics---2013---James Schummer, Rakesh V. Vohra

Industry participants agree that, when inclement weather forces the FAA to reassign airport landing slots, incentives and property rights should be respected. We show that the FAA's Compression algorithm is incentive compatible, but fails to guarantee a form of property rights. This is significant since these conditions were the motivation for introducing Compression a decade ago. We give an alternative mechanism that does satisfy these conditions. It has the flavor of Top Trading Cycle variants of Abdulkadiroğlu and Sönmez (1999) and Pápai (2000) for related but distinct models. Finally, both mechanisms may fail another condition: the incentive to vacate unusable landing slots. (JEL D45, D82, L93, L98, P14, R41)

Go Figure: The Strategy of Nonliteral Speech

- American Economic Journal: Microeconomics---2013---Hugo M. Mialon, Sue Mialon

We develop a model of figurative or indirect speech, which may convey a meaning that differs from its literal meaning. The model yields analytical conditions for speech to be figurative in equilibrium and delivers a number of comparative statics results. For instance, it predicts that the likelihood of figurative speech is greater if the benefit to the listener of correctly understanding the speaker is greater. We then apply the model to analyze particular forms of indirect speech, including terseness, irony, and veiled bribery. Interestingly, the model provides a novel argument for the

effectiveness of laws that strictly punish attempted bribery. (JEL D83, K42, Z13)

Trust, Reciprocity, and Favors in Cooperative Relationships

- American Economic Journal: Microeconomics---2013---Atila Abdulkadiroğlu, Kyle Bagwell

We study trust, reciprocity, and favors in a repeated trust game with private information. In our main analysis, players are willing to exhibit trust and thereby facilitate cooperative gains only if such behavior is regarded as a favor that must be reciprocated, either immediately or in the future. The size of a favor owed may decline over time, following neutral periods. Indeed, a favor-exchange relationship with this feature improves on a simple favor-exchange relationship. In some settings, an infrequent and symmetric punishment sustains greater cooperation. A honeymoon period followed by favor-exchange or symmetric punishment can also offer scope for improvement. (JEL C73, D82, Z13)

Set-Asides and Subsidies in Auctions

- American Economic Journal: Microeconomics---2013---Susan Athey, Dominic Coey, Jonathan Levin

Set-asides and subsidies are used extensively in government procurement and resource sales. We analyze these policies in an empirical model of US Forest Service timber auctions. The model fits the data well both within the sample of unrestricted sales used for estimation, and when we predict (out-of-sample) outcomes for small business set-asides. Our estimates suggest that restricting entry substantially reduces efficiency and revenue, although it increases small business participation. An alternative policy of subsidizing small bidders would increase revenue and small bidder profit, with little efficiency cost. We explain these findings by connecting to the theory of optimal auction design. (JEL D44, H57, L73, Q23)

Revealed Preference in a Discrete Consumption Space

- American Economic Journal: Microeconomics---2013---Matthew Polisson, John Quah

We show that an agent maximizing some utility function on a discrete (as opposed to continuous) consumption space will obey the generalized axiom of revealed preference (GARP), so long as the agent obeys cost efficiency. Cost efficiency will hold if there is some good, outside the set of goods being studied by the modeler, that can be consumed by the agent in continuous quantities. An application of Afriat's Theorem then guarantees that there is a strictly increasing utility function on the discrete consumption space that rationalizes price and demand observations. (JEL D11)

Decentralized Deterrence, with an Application to Labor Tax Auditing

- American Economic Journal: Microeconomics---2013---Edoardo Di Porto, Nicola Persico, Nicolas Sahuguet

This paper studies a new strategic auditing game in which atomistic auditors maximize the success rate of audits, and provides a method to calibrate its parameters based on audit data. Calibrating the model to Italian auditing data, we provide an estimate of tax evasion based on (non-random) audit data alone. Counterfactual simulation of the model quantifies the costs and benefits of alternative auditing policies. We compare decentralized enforcement with a counterfactual "commitment policy," and compute the loss from the former. (JEL H25, H26, M42)

On the Relationship between Preferential and Multilateral Trade Liberalization: The Case of Customs Unions

- American Economic Journal: Microeconomics---2013---Kamal Saggi, Alan Woodland, Halis Yildiz

This paper compares equilibrium outcomes of two games of trade liberalization. In the Bilateralism game,

countries choose whether to liberalize trade preferentially via a customs union (CU), multilaterally, or not at all. The Multilateralism game is a restricted version of the Bilateralism game in that countries cannot form CUs and can only undertake non-discriminatory trade liberalization. When countries have symmetric endowments, global free trade is the only stable equilibrium of both games. Allowing for endowment asymmetry, we isolate circumstances where the option to form CUs helps further the cause of multilateral liberalization as well as where it does not. (JEL F12, F13)

Measuring the Efficiency of an FCC Spectrum Auction

- American Economic Journal: Microeconomics---2013---Jeremy Fox, Patrick Bajari

We propose a method to structurally estimate the deterministic component of bidder valuations in FCC spectrum auctions, and apply it to the 1995-1996 C block auction. We base estimation on a pairwise stability condition: two bidders cannot exchange two licenses in a way that increases the sum of their valuations. Pairwise stability holds in some theoretical models of simultaneous ascending auctions under intimidatory collusion and demand reduction. Pairwise stability results in a matching game approach to estimation. We find that a system of four large regional licenses would raise the allocative efficiency of the C block outcome by 48 percent. (JEL D44, D45, H82, L82)

Social Learning with Coarse Inference

- American Economic Journal: Microeconomics---2013---Antonio Guarino, Philippe Jehiel

We study social learning by boundedly rational agents. Agents take a decision in sequence, after observing their predecessors and a private signal. They are unable to make perfect inferences from their predecessors' decisions: they only understand the relation between the aggregate distribution of actions and the state of nature, and make their inferences accordingly. We show that, in a discrete action space, even if agents receive signals of unbounded precision, there are asymptotic

inefficiencies. In a continuous action space, compared to the rational case, agents overweight early signals. Despite this behavioral bias, eventually agents learn the realized state of the world and choose the correct action. (JEL D82, D83)

The Welfare Effects of Use-or-Lose Provisions in Markets with Dominant Firms

- American Economic Journal: Microeconomics---2013---Ian Gale, Daniel P. O'Brien

A use-or-lose provision requires that firms employ a certain minimum fraction of their productive capacity. Variants have been used by regulators in the airline and wireless communications industries, among others. A typical stated objective is to limit capacity hoarding, thereby increasing aggregate output and welfare. When the dominant firm is more efficient than fringe firms, we find that imposing a use-or-lose provision induces the dominant firm to acquire capacity from the fringe, which causes aggregate output to fall. When the dominant firm is less efficient than the fringe, aggregate output rises. In both cases, total surplus may rise or fall. (JEL D43, K21, L13, L93)

Competition and the Use of Foggy Pricing

- American Economic Journal: Microeconomics---2013---Eugenio Miravete

Firms engage in foggy pricing when the menu of tariff options aims at profiting from consumer mistakes. The analysis of this paper concludes that the transition from monopoly to competition in the early US cellular telephone industry does not generally foster the use of such deceptive strategies. I offer three alternative measures to account for the fogginess of the menu of options offered by cellular carriers. All results are robust to the existence of uncertainty regarding future consumption at the time of choosing a particular tariff option, as well as to consumers' heterogeneity with respect to cellular telephone usage. (JEL D03, L11, L12, L13, L96)

A Theory of Occupational Choice with Endogenous Fertility

- American Economic Journal: Microeconomics---2012---Dilip Mookherjee, Silvia Prina, Debraj Ray

Theories based on partial equilibrium reasoning alone cannot explain the widespread negative cross-sectional correlation between parental wages and fertility, without restrictive assumptions on preferences and child-care costs. We argue that incorporating a dynamic general equilibrium analysis of returns to human capital can help explain observed empirical patterns. Other by-products of this theory include explanations for intergenerational mobility without stochastic shocks, connections between mobility and fertility patterns, and locally determinate steady states. Comparative statics exercises on steady states shed light on the effects of education, childcare subsidies, child labor regulations, and income redistribution policy on long run living standards. (JEL H23, I31, J13, J24, J62, J82)

Evolutionary Selection of Individual Expectations and Aggregate Outcomes in Asset Pricing Experiments

- American Economic Journal: Microeconomics---2012---Mikhail Anufriev, Cars Hommes

In recent "learning to forecast" experiments (Hommes et al. 2005), three different patterns in aggregate price behavior have been observed: slow monotonic convergence, permanent oscillations, and dampened fluctuations. We show that a simple model of individual learning can explain these different aggregate outcomes within the same experimental setting. The key idea is evolutionary selection among heterogeneous expectation rules, driven by their relative performance. The out-of-sample predictive power of our switching model is higher compared to the rational or other homogeneous expectations benchmarks. Our results show that heterogeneity in expectations is crucial to describe individual forecasting and aggregate price behavior. (JEL C53, C91, D83, D84, G12)

Information Acquisition in Competitive Markets: An Application to the US Mortgage Market

- American Economic Journal: Microeconomics--2012---Jeremy M. Burke,Curtis R. Taylor,Liad Wagman

How do price commitments impact the amount of information firms acquire about potential customers? We examine this question in the context of a competitive market where firms search for information that may disqualify applicants. Contracts are incomplete because the amount of information acquired cannot be observed. Despite competition, we find that firms search for too much information in equilibrium. If price discrimination is prohibited, members of high-risk groups suffer disproportionately high rejection rates. If rejected applicants remain in the market, the resulting adverse selection can be severe. We apply the results to the US mortgage market. (JEL D82, D83, D86, G21)

Auctions in Markets: Common Outside Options and the Continuation Value Effect

- American Economic Journal: Microeconomics---2012---Stephan Lauermann,Gábor Virag

In this paper, we study auctions with outside options provided by future market interaction focusing on the revenue effects of some information revelation policies. We show that auctions with less information revelation may yield higher revenues. In particular, we show that it is never optimal for the auctioneer to reveal information after the auction. Moreover, it is also not optimal to reveal information before the auction unless bidders already have precise information on their own. Our model provides a novel explanation for the prevalence of opaque trading mechanisms, and it offers insights into information sharing in dynamic models of trade. (JEL D44, D83)

Equity Aversion: Social Norms and the Desire to Be Ahead

- American Economic Journal: Microeconomics---2012---Chaim Fershtman,Uri Gneezy,John List

Inequity aversion models have dominated the behavioral economics landscape in the last decade. This study uses variants of dictator and trust games to provide empirical content to these models. We manipulate market features—such as competition over resources—to demonstrate that extant models cannot explain realistic manipulations of either game. For example, we show that if socially acceptable actions provide one player with a greater portion of the rents, she will put forth extra effort to secure them, to the detriment of the other person. When she can earn more than the other player through customary actions, we find a preference for selfishness. (JEL C71, C70, D03, Z13)

Truth in Consequentiality: Theory and Field Evidence on Discrete Choice Experiments

- American Economic Journal: Microeconomics--2012---Christian Vossler,Maurice Doyon,Daniel Rondeau

This paper explores methodological issues surrounding the use of discrete choice experiments to elicit values for public goods. We develop an explicit game theoretic model of individual decisions, providing conditions under which surveys with a single binary choice question, or sequence of binary choice questions, are incentive-compatible. We complement the theory with a framed field experiment, with treatments that span the spectrum from incentive-compatible, financially binding decisions to decisions with no direct financial consequences. The results suggest truthful preference revelation is possible, provided that participants view their decisions as having more than a weak chance of influencing policy. (JEL C83, C93, H41, Q23)

The Evolutionary Basis of Time Preference: Intergenerational Transfers and Sex

- American Economic Journal: Microeconomics--2012---Arthur Robson,Balazs Szentes,Emil Iantchev

We consider the evolutionary basis of time discounting with intergenerational transfers. We show that the notion of "reproductive value" from biology provides

the utility criterion for a parent to optimize the allocation of resources between transfers to offspring and to promote her own survival. This optimization has a natural dynamic programming formulation. We show that younger individuals may well be "too impatient," but older individuals "too patient" in accordance with observations. We compare the allocation of resources under sexual reproduction to that where there is asexual reproduction. Sex distorts time discounting; under plausible conditions, sex increases patience. (JEL A12, D91)

Competition, Comparative Performance, and Market Transparency

- American Economic Journal: Microeconomics---2012---Bruce I. Carlin, Shaun William Davies, Andrew Iannaccone

We study how competition affects market transparency, taking into account that comparative performance is assessed via tournaments and contests. Extending Dye (1985) to a multi-firm setting in which top performers are rewarded, we show that increased competition usually makes disclosure less likely, which lowers market transparency and may decrease per capita welfare. This result appears to be robust to several model variations and as such, has implications for market regulation. (JEL D82, D83, L77, L25)

Monopoly and the Incentive to Innovate When Adoption Involves Switchover Disruptions

- American Economic Journal: Microeconomics---2012---Thomas J. Holmes, David Levine, James A. Schmitz

Arrow (1962) argued that since a monopoly restricts output relative to a competitive industry, it would be less willing to pay a fixed cost to adopt a new technology. We develop a new theory of why a monopolistic industry innovates less. Firms often face major problems in integrating new technologies. In some cases, upon adoption of technology, firms must temporarily reduce output. We call such problems switchover disruptions. A cost of adoption, then, is the forgone rents

on the sales of lost or delayed production, and these opportunity costs are larger the higher the price on those lost units. (JEL D21, D42, L12, L14, O32, O33)

Bonus Payments versus Efficiency Wages in the Repeated Principal-Agent Model with Subjective Evaluations

- American Economic Journal: Microeconomics---2012---Lucas Maestri

We study an infinitely repeated principal-agent model with subjective evaluations. We compare the surplus in efficiency-wage equilibria and in bonus-payments equilibria. The agent receives a constant wage and is motivated by the threat of dismissal in efficiency-wage equilibria. The agent receives a bonus and quits the relationship after disagreements between his self-evaluation and the principal's performance appraisal in bonus-payments equilibria. We construct a class of equilibria with bonus payments that approach efficiency as patience increases. In contrast, payoffs from efficiency-wage equilibria are bounded away from the Pareto-payoff frontier for any discount factor. (JEL D82, J33, J41)

Public Disagreement

- American Economic Journal: Microeconomics---2012---Rajiv Sethi, Muhamet Yildiz

We develop a model of deliberation under heterogeneous beliefs and incomplete information, and use it to explore questions concerning the aggregation of distributed information and the consequences of social integration. We show that when priors are correlated, all private information is eventually aggregated and public beliefs are identical to those arising under observable priors. When priors are independently distributed, however, some private information is never revealed, and communication breaks down entirely in large groups. Interpreting integration in terms of the observability of priors, we show how increases in social integration lead to less divergent public beliefs on average. (JEL D82, D83, Z13)

Shopping Cost and Brand Exploration in Online Grocery

- American Economic Journal: Microeconomics---2012---Andrea Pozzi

This paper compares consumers' brand exploration when shopping online versus in a brick-and-mortar store. I use a new scanner dataset to compare the behavior of households shopping online and in-store at the same chain, for identical items and prices. I find that brand exploration is more prevalent in-store. My model quantifies the role of features of e-commerce, like the existence of "favorites lists" and the difficulty in verifying item quality. Limited exploration online implies higher barriers to entry on the Internet channel. Counterfactual exercises suggest that online advertising could make the Internet channel more competitive. (JEL D12, L11, L81, M31, M37)

Religious Beliefs, Religious Participation, and Cooperation

- American Economic Journal: Microeconomics---2012---Gilat Levy,Ronny Razin

We analyze the relation between religious beliefs, religious participation, and social cooperation. We focus on religions that instill beliefs about the connection between rewards and punishments and social behavior. We show how religious organizations arise endogenously, and identify a "spiritual" as well as a "material" payoff for being religious. We show that religious groups that are more demanding in their rituals are smaller, more cohesive, and are composed of individuals with more "extreme" beliefs. We use our framework to analyze the response of beliefs and religious membership to correlated shocks in society, such as natural disasters or periods of prosperity. (JEL D12, D83, Z12, Z13)

Competition and the Strategic Choices of Churches

- American Economic Journal: Microeconomics---2012---Adam D. Rennhoff,Mark Owens

We examine how the decisions of churches are impacted by the decisions of rival churches. Using a novel dataset, we estimate a model of strategic interaction, which accounts for the location and denomination of churches. We focus on a church's decision of whether to provide a weekday child care program. Empirical evidence indicates that churches compete more strongly with same-denomination churches than with different-denomination churches. These effects diminish with distance. (JEL J13, L31, Z12)

Employee Initiative and Managerial Control

- American Economic Journal: Microeconomics---2012---Heikki Rantakari

I analyze the impact of managerial involvement and the allocation of authority on employee initiative in a setting where both a manager and an employee can originate new ideas for implementation. I show that employee initiative is maximized through the combination of formal authority and limited but positive levels of involvement by the manager, a result which thus qualifies the motivational advantages of both formal delegation and a hands-off management strategy. This result arises through an indirect monitoring role played by managerial involvement that has been absent in previous frameworks, and the implications of which for the optimal organizational arrangement are further analyzed. (JEL D23, M12, M54)

Corrigendum: Ideologues Beat Idealists

- American Economic Journal: Microeconomics---2012---Sambuddha Ghosh,Vinayak Tripathi

To Review or Not to Review? Limited Strategic Thinking at the Movie Box Office

- American Economic Journal: Microeconomics--2012---Alexander Brown,Colin F. Camerer,Dan Lovallo

Film studios occasionally withhold movies from critics before their release. These cold openings provide a natural setting to apply laboratory-developed models

of limited strategic thinking to the field. In a set of 1,303 widely released movies, cold opening is correlated with a 10-30 percent increase in domestic box-office revenue, and a pattern of fan disappointment, consistent with the hypothesis that some moviegoers do not infer low quality from cold opening. While selection and endogeneity may play a role in these regressions, the full pattern of results is consistent with level-k and cognitive hierarchy behavioral-game-theoretic models. (JEL D12, D82, L82, M37)

Ideologues Beat Idealists

- American Economic Journal: Microeconomics---2012---Sambuddha Ghosh,Vinayak Tripathi

Our model considers a majority election between two candidates—an ideologue committed to a fixed policy and an idealist who implements the ex post choice of the majority. Voters are aware that their individual rankings of policies may change after the election according to common or idiosyncratic shocks. We show that in equilibrium the ideologue often beats the idealist, even when this choice hurts all voters. Inefficiency arises both for sincere and for strategic voters; we also show that it is more pervasive in the latter case. Groups may be inflexible even when each individual has a preference for flexibility. (JEL C72, D72)

Contracting with Heterogeneous Externalities

- American Economic Journal: Microeconomics---2012---Shai Bernstein,Eyal Winter

We model situations in which a principal offers contracts to a group of agents to participate in a project. Agents' benefits from participation depend on the identity of other participating agents. We assume heterogeneous externalities and characterize the optimal contracting scheme. We show that the optimal contracts' payoff relies on a ranking, which arise from a tournament among the agents. The optimal ranking cannot be achieved by a simple measure of popularity. Using the structure of the optimal contracts, we derive results on the principal's revenue extraction and the

role of the level of externalities' asymmetry. (JEL D62, D82, D86)

Ignorance Is Bliss: An Experimental Study of the Use of Ambiguity and Vagueness in the Coordination Games with Asymmetric Payoffs

- American Economic Journal: Microeconomics---2012---Marina Agranov,Andrew Schotter

We consider a game where one player, the Announcer, has to communicate the value of a payoff relevant state of the world to a set of players who play a coordination game with multiple equilibria. While the Announcer and the players agree that coordination is desirable, since the payoffs of the players at the equilibria are unequal, they disagree as to which equilibrium is best. We demonstrate experimentally that in such coordination games, in order to mask the asymmetry of equilibrium payoffs, it may be advantageous for a utilitarian benevolent Announcer to communicate in an ambiguous or vague manner. (JEL C71, D81, D83)

Contracting in Vague Environments

- American Economic Journal: Microeconomics---2012---Marie-Louise Vierø

This paper shows that a new trade-off arises in the optimal contract when contracting takes place with vague information (objective ambiguity), reflecting that real-world contracting often takes place under imprecise information. The choice-theoretic framework captures a decisionmaker's attitude towards vagueness by his optimism. The new trade-off is between incentive provision and exploitation of heterogeneity that arises endogenously because of the vague environment. Consequently, the optimal contract may distort effort in order to relax incentive compatibility and fully exploit the endogenously created heterogeneity, even when the agent is risk neutral and there is no insurance need in the relationship. (JEL D81, D82, D83, D86, L14)

On the Robustness of Anchoring Effects in WTP and WTA Experiments

- American Economic Journal: Microeconomics---2012---Drew Fudenberg, David Levine, Zacharias Maniadis

We reexamine the effects of the anchoring manipulation of Ariely, Loewenstein, and Prelec (2003) on the evaluation of common market goods and find very weak anchoring effects. We perform the same manipulation on the evaluation of binary lotteries, and find no anchoring effects at all. This suggests limits on the robustness of anchoring effects. (JEL C91, D12, D44)

Contractual and Organizational Structure with Reciprocal Agents

- American Economic Journal: Microeconomics---2012---Florian Englmaier, Stephen Leider

We solve for the optimal contract when agents are reciprocal, demonstrating that generous compensation can substitute for performance-based pay. Our results suggest several factors that make firms more likely to use reciprocal incentives. Reciprocity is most powerful when output is a poor signal of effort and when the agent is highly reciprocal and/or productive. Similarly, reciprocal incentives are attractive when firm managers have strong incentive pay and discretion over employee compensation. While reciprocal incentives can be optimal even when identical firms compete, a reciprocity contract is most likely when one firm has a match-specific productivity advantage with the agent. (JEL D23, D86, J33, M12, M52)

Incentive Schemes, Sorting, and Behavioral Biases of Employees: Experimental Evidence

- American Economic Journal: Microeconomics---2012---Ian Larkin, Stephen Leider

We investigate how the convexity of a firm's incentives interacts with worker overconfidence to affect sorting decisions and performance. We demonstrate, experimentally, that overconfident employees are more likely to sort into a nonlinear incentive scheme over a linear

one, even though this reduces pay for many subjects and despite the presence of clear feedback. Additionally, the linear scheme attracts demotivated, underconfident workers who perform below their ability. Our findings suggest that firms may design incentive schemes that adapt to the behavioral biases of employees to "sort in" ("sort away") attractive (unattractive) employees; such schemes may also reduce a firm's wage bill. (JEL D03, D83, J24, J31, M12)

Observational Learning and Demand for Search Goods

- American Economic Journal: Microeconomics---2012---Kenneth Hendricks, Alan Sorensen, Thomas Wiseman

We develop a model of herds in which consumers observe only the aggregate purchase history, not the complete ordered history of search actions. We show that the purchasing information changes the conditions under which herds can occur for both low- and high-quality products. Inferior products are certain to be ignored; high quality products may be ignored, but complete learning may also occur. We obtain closed form solutions for the probabilities of these events and conduct comparative statics. We test the model's predictions using data from an online music market created by Salganik, Dodds, and Watts (2006). (JEL D11, D12, L82)

Community Structure and Market Outcomes: A Repeated Games-in-Networks Approach

- American Economic Journal: Microeconomics---2012---Itay Fainmesser

Consider a large market with asymmetric information, in which sellers have the option to "cheat" their buyers, and buyers decide whether to repurchase from different sellers. We model active trade relationships as links in a buyer-seller network and study repeated games in such networks. Endowing sellers with incomplete knowledge of the network, we derive conditions that determine whether a network is consistent with cooperation between every buyer and seller that are

connected. Three network features reduce the minimal discount factor sufficient for cooperation: moderate and balanced competition, sparseness, and segregation. Incentive constraints are binding and rule out efficient networks. (JEL C73, D82, D85, Z13)

Partially Specified Probabilities: Decisions and Games

- American Economic Journal: Microeconomics---2012---Ehud Lehrer

The paper develops a theory of decision making based on partially specified probabilities. It takes an axiomatic approach using Anscombe and Aumann's (1963) setting, and is based on the concave integral for capacities. This theory is then expanded to interactive models in order to extend Nash equilibrium by introducing the concept of partially specified equilibrium. (JEL C70, D81, D83)

The Impact of Social Ties on Group Interactions: Evidence from Minimal Groups and Randomly Assigned Real Groups

- American Economic Journal: Microeconomics--2012---Lorenz Goette,David Huffman,Stephan Meier

Economists are increasingly interested in how group membership affects individual behavior. The standard method assigns individuals to "minimal" groups, i.e. arbitrary labels, in a lab. But real group often involve social interactions leading to social ties between group members. Our experiments compare randomly assigned minimal groups to randomly assigned groups involving real social interactions. While adding social ties leads to qualitatively similar, although stronger, in-group favoritism in cooperation, altruistic norm enforcement patterns are qualitatively different between treatments. Our findings contribute to the micro-foundation of theories of group preferences, and caution against generalizations from "minimal" groups to groups with social context. (JEL C92, D64, D71, Z13)

Fraternities and Labor-Market Outcomes

- American Economic Journal: Microeconomics---2012---Sergey Popov,Dan Bernhardt

We model how student choices to rush a fraternity, and fraternity admission choices, interact with signals firms receive about student productivities to determine labor-market outcomes. The fraternity and students value wages and fraternity socializing values. We provide sufficient conditions under which, in equilibrium, most members have intermediate abilities: weak students apply, but are rejected unless they have high socializing values, while most able students do not apply to avoid taint from association with weaker members. (JEL C72, J24, J31, Z13)

Competitive Nonlinear Taxation and Constitutional Choice

- American Economic Journal: Microeconomics---2012---Massimo Morelli,Huanxing Yang,Lixin Ye

In an economy where agents have different productivities and mobility, we compare a unified nonlinear optimal taxation with the equilibrium taxation that would be chosen by two competing tax authorities if the same economy were divided into two states. The overall level of progressivity and redistribution is unambiguously lower under competitive taxation; the "rich" are always in favor of competing authorities, whereas the "poor" are always in favor of unified taxation; the preferences of the middle class depend on the initial conditions in terms of the distribution of abilities, the relative power of the various classes, and mobility costs. (JEL D72, H21, H23, H24)

Matching in Networks with Bilateral Contracts

- American Economic Journal: Microeconomics---2012---John William Hatfield,Scott Kominers

We introduce a model in which firms trade goods via bilateral contracts which specify a buyer, a seller, and the terms of the exchange. This setting subsumes (many-to-many) matching with contracts, as well as supply chain matching. When firms' relationships do

not exhibit a supply chain structure, stable allocations need not exist. By contrast, in the presence of supply chain structure, a natural substitutability condition characterizes the maximal domain of firm preferences for which stable allocations are guaranteed to exist. Furthermore, the classical lattice structure, rural hospitals theorem, and one-sided strategy-proofness results all generalize to this setting. (JEL C78, D85, D86, L14)

Diverging Opinions

- American Economic Journal: Microeconomics---2012---James Andreoni,Tymofiy Mylovanov

People often see the same evidence but draw opposite conclusions, becoming polarized over time. More surprisingly, disagreements persist even when they are commonly known. We derive a model and present an experiment showing that opinions can diverge when one-dimensional opinions are formed from two-dimensional information. When subjects are given sufficient information to reach agreement, however, disagreement persists. Subjects discount information when it is filtered through the actions of others, but not when it is presented directly, indicating that common knowledge of disagreement may be the result of excessive skepticism about the decision-making skills of others. (JEL C92, D82, D83)

Platform Siphoning: Ad-Avoidance and Media Content

- American Economic Journal: Microeconomics---2011---Simon Anderson,Joshua Gans

Content providers rely on advertisers to pay for content. TiVo, remote controls, and pop-up ad blockers are examples of ad-avoidance technologies that allow consumers to view content without ads, and thereby siphon off the content without paying the "price." We examine the content provider's reaction to such technologies, demonstrating that their adoption increases advertising clutter (leading to a potential downward spiral), may reduce total welfare and content quality, and can lead to more mass-market content. We cast

doubt on the profitability of using subscriptions to counter the impact of ad-avoidance. (JEL L82, L86, M37)

Mnemonomics: The Sunk Cost Fallacy as a Memory Kludge

- American Economic Journal: Microeconomics---2011---Sandeep Baliga,Jeffrey Ely

We offer a theory of the sunk cost fallacy as an optimal response to limited memory. As new information arrives, a decision-maker may not remember all the reasons he began a project. The sunk cost gives additional information about future profits and informs subsequent decisions. The Concorde effect makes the investor more eager to complete projects when sunk costs are high and the pro-rata effect makes the investor less eager. In a controlled experiment we had subjects play a simple version of the model. In a baseline treatment subjects exhibit the pro-rata bias. When we induce memory constraints the effect reverses and the subjects exhibit the Concorde bias. (JEL D24, D83, G31)

Tracking Decision Makers under Uncertainty

- American Economic Journal: Microeconomics---2011---Amos Arieli,Yaniv Ben-Ami,Ariel Rubinstein

Eye tracking is used to investigate the procedures that participants employ in choosing between two lotteries. Eye movement patterns in problems where the deliberation process is clearly identified are used to substantiate an interpretation of the results. The data provide little support for the hypothesis that decision makers rely exclusively upon an expected utility type of calculation. Instead eye patterns indicate that decision makers often compare prizes and probabilities separately. This is particularly true when the multiplication of sums and probabilities is laborious to compute. (JEL D81, D87)

Intermediation Reduces Punishment (and Reward)

- American Economic Journal: Microeconomics---2011---Lucas Coffman

This paper shows moral decision making is not well predicted by the overall fairness of an act but rather by the fairness of the consequences that follow directly. In laboratory experiments, third-party punishment for keeping money from a poorer player decreases when an intermediary actor is included in the transaction. This is true for completely passive intermediaries, even though intermediation decreases the payout of the poorest player and hurts equity, and because intermediation distances the transgressor from the outcome. A separate study shows rewards of charitable giving decrease when the saliency of an intermediary is increased. (JEL A13, D63, D64)

Performance and Turnover in a Stochastic Partnership

- American Economic Journal: Microeconomics---2011---David McAdams

Suppose that players in a stochastic partnership have the option to quit and rematch anonymously. If stage-game payoffs are subject to a persistent initial shock, the (unique) social welfare-maximizing equilibrium induces a "dating" process in which all partners enjoy the full potential equilibrium gains from each match. By contrast, maximizing social welfare in non-stochastic repeated games with rematching requires that players burn money or otherwise fail to realize all potential equilibrium gains. Comparative statics on welfare and turnover are also provided, consistent with documented patterns of "survivorship bias" and "honeymoon." (JEL C72, C73, C78)

Hyperbolic Discounting and the Sustainability of Rotational Savings Arrangements

- American Economic Journal: Microeconomics---2011---Karna Basu

People across the developing world join rotational savings and credit associations (roscas) to fund repeated purchases of nondivisible goods. When the scope for punishment is weak, there is a natural question about why agents not defect from roscas. This paper models roscas as commitment savings devices and derives conditions under which hyperbolic discounters will never defect, even in the absence of formal contracting, social punishment, and reputation. I show why, unlike with standard commitment devices, a hyperbolic discounter will not postpone entry into a rosca. Finally, this paper makes predictions about the relative survival of random and fixed roscas. (JEL D14, D91, O12)

Subjective Probabilities on a State Space

- American Economic Journal: Microeconomics---2011---Edi Karni

This paper extends the analytical framework of Karni (2011) to include a state space and advances a choice-based definition of subjective probabilities on this space. These probabilities represent the beliefs of Bayesian decision makers regarding the likelihoods of events, thus resolving a long-standing, fundamental difficulty with the definition of subjective probabilities. (JEL D81, D83)

Competition in Multi-sided Markets: Divide and Conquer

- American Economic Journal: Microeconomics---2011---Bruno Jullien

This paper studies Stackelberg price competition in a multi-sided market. The second-mover can engage in divide-and-conquer strategies, which involve cross-subsidies between sides. The paper recovers bounds on profits, and refines the results with a selection criteria whereby consumers resolve coordination failure in favor of a focal platform. It then analyzes perfect price discrimination with network effects, and two-sided market, shedding light on inefficiencies and strategic choices by platforms. A leading platform may refrain from selling to some side in order to soften competition, it tends to favor excessively balanced market shares and may

prefer compatibility to reduce price competition. (JEL D43, D85)

Testing Game Theory in the Field: Swedish LUPI Lottery Games

- American Economic Journal: Microeconomics---2011---Robert Östling, Joseph Wang, Eileen Y. Chou, Colin F. Camerer

Game theory is usually difficult to test in the field because predictions typically depend sensitively on features that are not controlled or observed. We conduct one such test using both laboratory and field data from the Swedish lowest unique positive integer (LUPI) game. In this game, players pick positive integers and whoever chooses the lowest unique number wins. Equilibrium predictions are derived assuming Poisson distributed population uncertainty. The field and lab data show similar patterns. Despite various deviations from equilibrium, there is a surprising degree of convergence toward equilibrium. Some deviations can be rationalized by a cognitive hierarchy model. (JEL C70, C93, D44, H27)

Risk, Delay, and Convex Self-Control Costs

- American Economic Journal: Microeconomics---2011---Drew Fudenberg, David Levine

We develop a dual-self model of self-control that is compatible with modern dynamic macroeconomic theory and evidence. We show that a convex cost of self-control explains a wide range of behavioral anomalies concerning risk, including the Allais paradox, and also explains the observed interaction between risk and delay. We calibrate the model to obtain a quantitative fit. We find that most of the data can be explained with subjective interest rates in the range of 1-7 percent, short-run relative risk aversion of about two, and a time horizon of one day for the short-run self. (JEL D11, D44, D81)

Can Warranties Substitute for Reputations?

- American Economic Journal: Microeconomics---2011---James W. Roberts

In markets where product quality is imperfectly observed or delivery is uncertain, seller reputations and product guarantees or warranties can impact equilibrium prices and quantities. Using data from a decentralized online market, this paper empirically investigates the substitutability of product guarantees for seller reputation. I find that a "guaranteed or your money back" promise from the market maker does not substitute for reputation, either in determining price or the probability of sale. The most likely causes of the policy's ineffectiveness are delays in buyer response to the guarantee and skepticism about reimbursement in the event of fraud. (JEL D82, L14, L15, L81, M31)

Getting More Work for Nothing? Symbolic Awards and Worker Performance

- American Economic Journal: Microeconomics---2011---Michael Kosfeld, Susanne Neckermann

We study the impact of status and social recognition on worker performance in a field experiment. In collaboration with an international non-governmental organization, we hired students to work on a database project. Students in the award treatment were offered a congratulatory card honoring the best performance. The award was purely symbolic to ensure that any behavioral effect is driven by non-material benefits. Our results show that the award increases performance by about 12 percent on average. The results provide strong evidence for the motivating power of status and social recognition in labor relations. (JEL C93, J33, M12, M52)

On the Determinants of Organizational Forgetting

- American Economic Journal: Microeconomics---2011---Guy David, Tanguy Brachet

Studies of organizational learning and forgetting identify potential channels through which the firm's production experience is lost. These channels have differing implications for efficient resource allocation within the firm, but their relative importance has been ignored to date. We develop a framework for distinguishing the contributions of labor turnover and human capital

depreciation to organizational forgetting. We apply our framework to a novel dataset of ambulance companies and their workforce. We find evidence of organizational forgetting, which results from skill decay and turnover effects. The latter has twice the magnitude of the former. (JEL D23, D83, J24, J63)

Menu Pricing and Learning

- American Economic Journal: Microeconomics---2011---Alessandro Bonatti

We analyze the design of dynamic menus to sell experience goods. The quality of the product is initially unknown, and the total quantity sold in each period determines the amount of information in the market. We characterize the optimum menu as a function of consumers' beliefs, and the dynamic adjustments resulting from the diffusion of information. The firm faces a dynamic trade-off between gains from trade, information production, and information rents. It initially charges lower prices, sacrificing short-term revenue to increase sales. As more information is revealed, prices increase, and low-valuation buyers are excluded, even when the product's quality is high. (JEL D42, D82, D83, L12)

Equilibrium Selection in the Repeated Prisoner's Dilemma: Axiomatic Approach and Experimental Evidence

- American Economic Journal: Microeconomics---2011---Matthias Blonski, Peter Ockenfels, Giancarlo Spagnolo

We propose an axiomatic approach for equilibrium selection in the discounted, infinitely repeated symmetric Prisoner's Dilemma. Our axioms characterize a unique selection criterion that is also useful as a tool for applied comparative statics exercises as it results in a critical discount factor δ^* strictly larger than δ , the standard criterion that has often been used in applications. In an experimental test we find a strong predictive power of our proposed criterion. For parameter changes where the standard and our criterion predict differently, changes in observed cooperation

follow predictions based on δ^* . (JEL C72, C73, C92, D81)

Names and Reputations: An Empirical Analysis

- American Economic Journal: Microeconomics---2011---Ryan McDevitt

This paper tests several predictions from the literature on firm reputation, and confirms a main result: poor performance leads a firm to conceal its reputation. A residential plumbing firm with a record of complaints one standard deviation above the mean is 133.2 percent more likely to change its name. In addition, firms with longer track records are less likely to change their names or exit, while firms with more firm-specific investments, such as advertising, are more likely to change their names than exit. In addition, firms in small markets value their reputations comparatively more than firms in large markets. (JEL L14, L25, L84)

Kludged

- American Economic Journal: Microeconomics---2011---Jeffrey Ely

Is there reason to believe that our brains have evolved to make efficient decisions so that the details of the internal process are irrelevant? I develop a model which illustrates a limitation of adaptive processes: improvements tend to come in the form of kludges. A kludge is a marginal adaptation that compensates for, but does not eliminate, fundamental design inefficiencies. When kludges accumulate, the result can be perpetually sub-optimal behavior even in a model of evolution in which arbitrarily large innovations occur infinitely, often with probability 1. (JEL D03, D87)

Bankruptcy, Finance Constraints, and the Value of the Firm

- American Economic Journal: Microeconomics---2011---Douglas Gale, Piero Gottardi

We study a competitive model in which market incompleteness implies that debt-financed firms may default in some states of nature, and default may lead to the

sale of the firms' assets at fire sale prices when a finance constraint is binding. The anticipation of such "losses" alone may distort firms' investment decisions. We characterize the conditions under which fire sales occur in equilibrium, and their consequences on firms' investment decisions. We also show that endogenous financial crises may arise in this environment, with asset prices collapsing as a result of pure self-fulfilling beliefs. Finally, we examine alternative interventions to restore the efficiency of equilibria. (JEL D83, G31, G32, G33)

A Theory of Outsourcing and Wage Decline

- American Economic Journal: Microeconomics---2011---Thomas J. Holmes, Julia Thornton Snider

This paper develops a theory of outsourcing in which the circumstances under which factors of production can grab rents play the leading role. One factor has monopoly power (call this labor) while a second factor does not (call this capital). There are two kinds of production tasks: labor-intensive and capital-intensive. We show that if frictions limiting outsourcing are not too large, in equilibrium labor-intensive tasks are separated from capital-intensive tasks into distinct firms. When a capital-intensive country is opened to free trade, outsourcing increases and labor rents decline. A decrease in outsourcing frictions lowers labor rents. (JEL J31, L22, L24)

Zeros, Quality, and Space: Trade Theory and Trade Evidence

- American Economic Journal: Microeconomics---2011---Richard Baldwin, James Harrigan

Bilateral, product-level data exhibit a number of strong patterns that can be used to evaluate international trade theories, notably the spatial incidence of "export zeros" (correlated with distance and importer size), and of export unit values (positively related to distance). We show that leading theoretical trade models fail to explain at least some of these facts, and propose a variant of the Melitz model that can account for all the facts. In our model, high quality firms are the

most competitive, with heterogeneous quality increasing with firms' heterogeneous cost. (JEL F11, F14, F40)

The Principal-Agent Approach to Testing Experts

- American Economic Journal: Microeconomics---2011---Wojciech Olszewski, Marcin Pęski

Recent literature on testing experts shows that it is often impossible to determine whether an expert knows the stochastic process that generates data. Despite this negative result, we show that there often exist contracts that allow a decision maker to attain the first-best payoff without learning the expert's type. This kind of full-surplus extraction is always possible in infinite-horizon models in which future payoffs are not discounted. If future payoffs are discounted (but the discount factor tends to 1), the possibility of full-surplus extraction depends on a constraint involving the forecasting technology. (JEL D82)

The Good News-Bad News Effect: Asymmetric Processing of Objective Information about Yourself

- American Economic Journal: Microeconomics---2011---David Eil, Justin M. Rao

We study processing and acquisition of objective information regarding qualities that people care about, intelligence and beauty. Subjects receiving negative feedback did not respect the strength of these signals, were far less predictable in their updating behavior and exhibited an aversion to new information. In response to good news, inference conformed more closely to Bayes' Rule, both in accuracy and precision. Signal direction did not affect updating or acquisition in our neutral control. Unlike past work, our design varied direction and agreement with priors independently. The results indicate that confirmation bias is driven by direction; confirmation alone had no effect. (JEL D82, D83)

Taboos and Identity: Considering the Unthinkable

- American Economic Journal: Microeconomics---2011---Chaim Fershtman, Uri Gneezy, Moshe Hoffman

A taboo is an "unthinkable" action. Even the thought of violating a taboo triggers a punishment. We consider a model in which taboos are part of the definition of one's identity. Deliberating over breaking the taboo changes the individual's choice set, and provides information on possible private benefits. The strength of the taboo is determined by the number of individuals that obey it. We analyze the relationship between social heterogeneity and taboos' strength. We then examine societies in which individuals choose among several identities characterized by different taboos. We characterize the conditions that give rise to a multi-identity society. (JEL Z13)

The Economics of Contingent Re-auctions

- American Economic Journal: Microeconomics---2011---Sandro Brusco, Giuseppe Lopomo, Leslie M. Marx

We consider an auction environment where an object can be sold with usage restrictions that generate benefits to the seller but decrease buyers' valuations. In this environment, sellers such as the FCC have used "contingent re-auctions," offering the restricted object with a reserve price, but re-auctioning it without restrictions if the reserve is not met. We show that contingent re-auctions are generally neither efficient nor optimal for the seller. We propose an alternative "exclusive-buyer mechanism" that can implement the efficient outcome in dominant strategies. In certain environments, parameters can be chosen so the seller's surplus is maximized across all selling procedures. (JEL D44, D82, H82)

Exclusive Contracts, Innovation, and Welfare

- American Economic Journal: Microeconomics---2011---Yongmin Chen, David Sappington

We extend Philippe Aghion and Patrick Bolton's (1987) classic model to analyze the equilibrium incidence and impact of exclusive contracts in a setting where research and development (R&D) drives industry performance. An exclusive contract between an incumbent supplier and a buyer arises when patent protection and/or the incumbent's R&D ability are sufficiently pronounced. The exclusive contract generally reduces the entrant's R&D, and can reduce the incumbent's R&D. Exclusive contracts reduce welfare if the incumbent's R&D ability is sufficiently limited, but can increase welfare if patent protection and the incumbent's R&D ability are sufficiently pronounced. (JEL D86, L14, O31)

The Effect of Market Structure on Cellular Technology Adoption and Pricing

- American Economic Journal: Microeconomics---2011---Katja Seim, V Viard

We examine how structural changes in the mobile telecommunications industry between 1996, when local markets were duopolies, and 1998, when varying degrees of regulated entry had occurred, affected firms' product offerings and nonlinear pricing strategies. We relate firms' digital technology adoption and the characteristics of their calling plan menus to the amount of entry in local markets. We find that entry induces firms to offer larger menus with more evenly spread plans, both directly and by accelerating the introduction of digital menus with such features. Prices decline with entry, in particular for high-valuation consumers who benefit from steeper quantity discounts. (JEL L11, L13, L96, L98, O33)

Corrigendum: Sex Selection and Gender Balance

- American Economic Journal: Microeconomics---2011---V Bhaskar

Strategic Entry Deterrence and the Behavior of Pharmaceutical Incumbents Prior to Patent Expiration

- American Economic Journal: Microeconomics---2011---Glenn Ellison, Sara Fisher Ellison

This paper develops a new approach to testing for strategic entry deterrence and applies it to the behavior of pharmaceutical incumbents before patent expiration. It examines a cross section of markets, determining whether behavior is nonmonotonic in market size. Under some conditions, investment levels will be monotone in market size if firms do not invest to deter entry. Strategic investments to deter entry, however, may result in nonmonotonic investment because they are unnecessary in small markets, and impossible in large ones. Consistent with an entry-deterrence motivation is the finding that incumbents in medium-sized markets advertise less prior to patent expiration. (JEL D92, G31, L11, L21, L65)

Experimentation, Patents, and Innovation

- American Economic Journal: Microeconomics---2011---Daron Acemoglu,Kostas Bimpikis,Asuman Ozdaglar

This paper studies a simple model of experimentation and innovation. Our analysis suggests that patents improve the allocation of resources by encouraging rapid experimentation and efficient ex post transfer of knowledge. Each firm receives a signal on the success probability of a project and decides when to experiment. Successes can be copied. First, we assume that signal qualities are the same. Symmetric equilibria involve delayed and staggered experimentation, whereas the optimal allocation never involves delays and may involve simultaneous experimentation. Appropriately designed patents implement the optimal allocation. Finally, we discuss the case when signals differ and are private information. (JEL D82, D83, O31, O33, O34)

Incentives and Innovation: A Multitasking Approach

- American Economic Journal: Microeconomics---2011---Thomas Hellmann,Veikko Thiele

This paper develops a multitask model where employees make choices between their assigned standard tasks, for which the firm has a performance measure and provides incentives, and privately observed innovation

opportunities that fall outside of the performance metrics, and require ex post bargaining. If innovations are highly firm specific, firms provide lower-powered incentives for standard tasks to encourage more innovation, yet in equilibrium employees undertake too few innovations. The opposite occurs if innovations are less firm specific. We also investigate the effectiveness of several possibilities to encourage innovation, such as tolerance for failure, stock-based compensation, and the allocation of intellectual property rights. (JEL D21, J33, M12, O31, O34)

Testable Implications of Gross Substitutes in Demand for Two Goods

- American Economic Journal: Microeconomics---2011---Christopher Chambers,Federico Echenique,Eran Shmaya

We present a nonparametric "revealed-preference test" for gross substitutes in demand for two goods. (JEL D01, D11)

Running on Empty? Financial Leverage and Product Quality in the Supermarket Industry

- American Economic Journal: Microeconomics---2011---David A. Matsa

This paper examines whether debt financing can undermine a supermarket firm's incentive to provide product quality. In the supermarket industry, product availability is an important measure of a retailer's quality. Using US consumer price index microdata to track inventory shortfalls, I find that taking on high financial leverage increases shortfalls. Highly leveraged firms appear to be degrading their products' quality in order to preserve current cash flow for debt service. Although reducing quality can erode both current sales and customer loyalty, firms appear to be willing to risk these outcomes in order to achieve benefits associated with debt finance. (JEL D92, G31, G32, L15, L81)

A Welfare Analysis of Arbitration

- American Economic Journal: Microeconomics---2011---Wojciech Olszewski

The paper compares conventional and final-offer arbitration. One party is supposed to make a payment to another party, whose amount depends on a state. Under one scenario, parties obtain signals about the state, which cannot be recognized by the opponents. If the arbitrator's ability of recognizing signals is high, the frequency of requesting arbitration is lower under conventional than under final-offer arbitration. If this ability is low, final-offer arbitration dominates conventional arbitration in quite a similar sense. Under the second scenario, parties believe that their opponents have wrong signals. Then, conventional arbitration approximates the original outcome better than final-offer arbitration. (JEL C78, D82, D86, J52)

Sex Selection and Gender Balance

- American Economic Journal: Microeconomics---2011---V Bhaskar

We model the equilibrium sex ratio when parents can choose the sex of their child. With intrinsic son preference, sex selection results in a male-biased sex ratio. This is inefficient due to a marriage market congestion externality. Medical innovations that facilitate selection aggravate the inefficiency. If son preference arises endogenously, due to population growth causing an excess supply of women on the marriage market, selection may improve welfare. Empirically, sex selection causes an excess of males and reduces welfare in China. In most parts of India, cohort sizes are growing, implying an excess supply of women. (JEL J12, J13, J16, O15, P23)

Ensuring Sales: A Theory of Inter-firm Credit

- American Economic Journal: Microeconomics---2011---Arup Daripa,Jeffrey Nilsen

We propose a simple theory to account for the prevalence of interfirm credit at an interest rate of zero. A downstream firm trades off inventory holding costs against lost sales. Lost final sales impose a negative externality on the upstream firm. The solution requires a subsidy limited by the value of inputs. Allowing the downstream firm to pay with a delay is precisely such

a solution. A reverse externality accounts for the use of prepayment. We clarify how input prices vary with such policies, and when trade credit/prepayment is more efficient than pure input price adjustments. (JEL D21, D62, D92, G31, L25)

Too Many Products: Decentralized Decision Making in Multinational Firms

- American Economic Journal: Microeconomics---2011---Catherine Thomas

I analyze country-level product ranges offered by multinational laundry detergent manufacturers in Western Europe. Observed product range variation across countries exceeds the optimal firm-level response to differences in consumer preferences and retail environments. Counterfactual analysis reveals that increased product range standardization would reduce firm costs and increase profits. These findings are consistent with theory models of local agency, where decentralized decision making can be the constrained optimal organizational form despite the resulting lack of coordination across divisions. My analysis suggests that organizational structure affects product market outcomes and firm performance. (JEL D23, F23, L21, L25, L65)

"Personal Influence": Social Context and Political Competition

- American Economic Journal: Microeconomics---2011---Andrea Galeotti,Andrea Mattozzi

This paper studies the effect of social learning on political outcomes in a model of informative campaign advertising. Voters' communication network affects parties' incentives to disclose political information, voters' learning about candidates running for office, and polarization of the electoral outcome. In richer communication networks, parties disclose less political information and voters are more likely to possess erroneous beliefs about the characteristics of the candidates. In turn, a richer communication network among voters may lead to political polarization. These results are reinforced when interpersonal communication occurs

more frequently among ideologically homogeneous individuals and parties can target political advertising. (JEL D72, D85, M37, Z13)

Corrigendum: Optimal Provision of Multiple Excludable Public Goods

- American Economic Journal: Microeconomics---2011---Hanming Fang, Peter Norman

Optimal Provision of Multiple Excludable Public Goods

- American Economic Journal: Microeconomics---2010---Hanming Fang, Peter Norman

This paper studies the optimal provision mechanism for multiple excludable public goods. For a class of problems with symmetric goods and binary valuations, we show that the optimal mechanism involves bundling if a regularity condition, akin to a hazard rate condition, on the distribution of valuations is satisfied. Relative to separate provision mechanisms, the optimal bundling mechanism may increase the asymptotic provision probability of socially efficient public goods from zero to one, and decreases the extent of use exclusions. If the regularity condition is violated, the optimal solution replicates the separate provision outcome for the two-good case. (JEL D82, H41)

Inequality and Markets: Some Implications of Occupational Diversity

- American Economic Journal: Microeconomics---2010---Dilip Mookherjee, Debraj Ray

This paper studies income distribution in an economy with borrowing constraints. Parents leave both financial and educational bequests; these determine the occupational choices of children. Occupational returns are determined by market conditions. If the span of occupational investments is large, long-run wealth distributions display persistent inequality. With a "rich" set of occupations, so that training costs form an interval, the distribution is unique and the average return to education must rise with educational investment.

This finding contrasts with the usual presumption of diminishing returns to human capital. It is the central testable proposition of this paper. (JEL D14, D31, J24)

Organizing for Synergies

- American Economic Journal: Microeconomics---2010---Wouter Dessein, Luis Garicano, Robert Gertner

Large companies are usually organized into business units, yet some activities are almost always centralized in a company-wide functional unit. We first show that organizations endogenously create an incentive conflict between functional managers (who desire excessive standardization) and business-unit managers (who desire excessive local adaptation). We then study how the allocation of authority and tasks to functional and business-unit managers interacts with this endogenous incentive conflict. Our analysis generates testable implications for the likely success of mergers and for the organizational structure and incentives inside multidivisional firms. (JEL D23, D86, G34, L22)

Intergenerational Cultural Transmission as an Evolutionary Game

- American Economic Journal: Microeconomics---2010---James D. Montgomery

We generalize the Bisin-Verdier model of intergenerational transmission to permit an arbitrary number of cultural traits. A key observation—that this model is equivalent to an evolutionary game under replicator dynamics—facilitates our analysis. For two special cases, obtained by restricting the pattern of "cultural distastes" between traits, we demonstrate global stability of the long-run distribution of traits using recent results on stable games and potential games. For the general three-trait case, we show that all three traits survive in the long run only if each trait satisfies an "invasion condition" involving the cultural distaste parameters. (JEL C73, D91, Z13)

Security Price Informativeness with Delegated Traders

- American Economic Journal: Microeconomics---2010---Gary Gorton,Ping He,Lixin Huang

Trade in securities markets is conducted by agents acting for principals, using "mark-to-market" contracts whereby performance is assessed using security market prices. We endogenize contract choices, information production, informed trading, and security price informativeness. But there is a contract externality. Prices are informative only because other principals induce their agents to trade based on privately produced information. The agent-traders then have an incentive to coordinate and shirk. The market price is less informative, reducing the effectiveness of mark-to-market contracts. By using managerial discretion to vary the contract type unpredictably, principals mitigate traders' coordinated manipulation and improve price informativeness. (JEL D82, D86, G12)

Hicksian Welfare Measures and the Normative Endowment Effect

- American Economic Journal: Microeconomics---2010---Thomas Weber

We show that the Hicksian welfare measures of compensating variation and equivalent variation coincide if one of them is evaluated at a compensated income. The measures are nondecreasing in income if the varied attribute and income are complementary, and indirect utility is concave in income. Income monotonicity implies the normative endowment effect, where the equivalent variation exceeds the compensating variation. We provide sufficient conditions for the normative endowment effect and discuss empirical implications. In the global absence of a strict (anti-) endowment effect, both Hicksian welfare measures must be independent of income and the indirect utility function additively separable in income. (JEL D11, D63)

Identification and Semiparametric Estimation of Equilibrium Models of Local Jurisdictions

- American Economic Journal: Microeconomics---2010---Dennis Epple,Michael Peress,Holger Sieg

We develop a new model of household sorting in a system of residential neighborhoods. We show that this model is partially identified without imposing parametric restrictions on the distribution of unobserved tastes for neighborhood quality and the shape of the indirect utility function. The proof of identification is constructive and can be used to derive a new semiparametric estimator. Our empirical application focuses on residential choices in the Pittsburgh metropolitan area. We find that sorting of households with children exhibit more stratification by income than sorting of households without children. (JEL C51, D12, H41, J12, R21, R23)

Naïve Herding in Rich-Information Settings

- American Economic Journal: Microeconomics---2010---Erik Eyster,Matthew Rabin

In social-learning environments, we investigate implications of the assumption that people naïvely believe that each previous person's action reflects solely that person's private information. Naïve herders inadvertently over-weight early movers' private signals by neglecting that interim herders' actions also embed these signals. Such "social confirmation bias" leads them to herd with positive probability on incorrect actions even in extremely rich-information settings where rational players never do. Moreover, because they become fully confident even when wrong, naïve herders can be harmed, on average, by observing others. (JEL D82, D83)

Tracing the Woes: An Empirical Analysis of the Airline Industry

- American Economic Journal: Microeconomics---2010---Steven Berry,Panle Jia,Panle Jia Barwick

The US airline industry went through tremendous turmoil in the early 2000s, with four major bankruptcies,

two major mergers, and various changes in network structure. This paper presents a structural model of the industry, and estimates the impact of demand and supply changes on profitability. Compared with 1999, we find that, in 2006, air-travel demand was 8 percent more price sensitive, passengers displayed a stronger preference for nonstop flights, and changes in marginal cost significantly favored nonstop flights. Together with the expansion of low-cost carriers, they explain more than 80 percent of legacy carriers' variable profit reduction. (JEL L13, L25, L93)

The Political Economy of Debt Bondage

- American Economic Journal: Microeconomics---2010---Ulf von Lilienfeld-Toal,Dilip Mookherjee

What are the effects of restricting bonded labor clauses in tenancy or debt contracts? While such restrictions reduce agents' ability to credibly commit ex ante to repay principals in states where they default on their financial obligations, they also generate a pecuniary externality on other principal-agent pairs by reducing the equilibrium profit earned by principals. This turns out to imply that on both political and normative grounds, restrictions on bonded labor become more attractive when borrowers become wealthier or the range of collateral instruments widens. (JEL D82, D86, J82, K12)

Why Tie a Product Consumers Do Not Use?

- American Economic Journal: Microeconomics---2010---Dennis Carlton,Joshua Gans,Michael Waldman

We provide an explanation for tying not based on any of the standard arguments: efficiency, price discrimination, or exclusion. In our analysis a monopolist ties a complementary good to its monopolized good, but consumers do not use the tied good. The tie is profitable because it shifts profits from a complementary good rival to the monopolist. We show such tying is socially inefficient, but arises only when the tie is socially efficient in the absence of the rival. We relate this form of tying to several examples, discuss how

it can also arise under competition, and explore its antitrust implications. (JEL D42, K21, L12, L25, L40)

Which Inequality? The Inequality of Endowments versus the Inequality of Rewards

- American Economic Journal: Microeconomics---2010---Ed Hopkins,Tatiana Kornienko

We introduce a new distinction between inequality in initial endowments (e.g., ability, inherited wealth) and inequality of what one can obtain as rewards (e.g., prestigious positions, money). We show that, when society allocates resources via tournaments, these two types of inequality have opposing effects on equilibrium behavior and well-being. Greater inequality of rewards hurts most people -- both the middle class and the poor -- who are forced into greater effort. Conversely, greater inequality of endowments benefits the middle class. Thus, the correctness of our intuitions about the implications of inequality is hugely affected by the type of inequality considered. (JEL D63, D82)

Preventing Crime Waves

- American Economic Journal: Microeconomics---2010---Philip Bond,Kathleen Hagerty

We study the design of enforcement mechanisms when enforcement resources are chosen ex ante and are inelastic ex post. Multiple equilibria arise naturally. We identify a new answer to the old question of why non-maximal penalties are used to punish moderate actions: "marginal" penalties are much more attractive in the Pareto inferior crime wave equilibrium. Specifically, although marginal penalties have both costs and benefits, the net benefit is strictly positive in the crime wave equilibrium. In contrast, marginal penalties frequently have a net cost in the noncrime wave equilibrium. We also show that increasing enforcement resources may worsen crime. (JEL D82, K42)

Ascending Prices and Package Bidding: A Theoretical and Experimental Analysis

- American Economic Journal: Microeconomics---2010---John Kagel,Yuanchuan Lien,Paul Milgrom

We use theory and experiment to explore the performance of multi-round, price-guided, combinatorial auctions. We define efficiency-relevant and core-relevant packages and show that if bidders bid aggressively on these and losing bidders bid to their limits, then the auction leads to efficient or core allocations. We study the theoretically relevant behaviors and hypothesize that subjects will make only a few significant bids, and that certain simulations with auto-bidders will predict variations in performance across different environments. Testing the combinatorial clock auction (CCA) design, we find experimental support for these two hypotheses. We also compare the CCA to a simultaneous ascending auction. (JEL D44)

Money, Political Ambition, and the Career Decisions of Politicians

- American Economic Journal: Microeconomics---2010---Michael Keane, Antonio Merlo

We assess the impact of a variety of policies that may influence the career decisions of members of the US Congress. These policies alter incentives to run for re-election, run for higher office or leave Congress, by altering wages, non-pecuniary rewards and career prospects (both in and out of Congress). We find that the effect of most policies varies considerably across different types of politicians. For example, a reduction in the congressional wage would disproportionately induce exit from Congress by "skilled" politicians, Democrats, and politicians who were relatively young when first elected, but not by politicians who most value legislative accomplishments ("achievers"). (JEL D72)

Resource Allocation and Organizational Form

- American Economic Journal: Microeconomics---2010---Guido Friebel, Michael Raith

We develop a theory of firm scope and structure in which merging two firms allows the integrated firm's top management to allocate resources that are costly to trade. However, information about their use resides with division managers. We show that establishing

truthful upward communication raises the cost of inducing managerial effort compared with stand-alone firms. This effect dominates a positive effect on effort driven by competition for the firm's resources. We derive predictions about optimal firm scope and structure. In particular, we show why it is optimal to separate the tasks of allocating resources and running a division. (JEL D21, D23, D82, G34)

Information Disclosure and Unraveling in Matching Markets

- American Economic Journal: Microeconomics---2010---Michael Ostrovsky, Michael Schwarz

This paper explores information disclosure in matching markets. A school may suppress some information about students in order to improve their average job placement. We consider a setting with many schools, students, and jobs, and show that if early contracting is impossible, the same, "balanced" amount of information is disclosed in essentially all equilibria. When early contracting is allowed and information arrives gradually, if schools disclose the balanced amount of information, students and employers will not find it profitable to contract early. If they disclose more, some students and employers will prefer to sign contracts before all information is revealed. (JEL C78, D82, D83)

Open Access and Dynamic Efficiency

- American Economic Journal: Microeconomics---2010---Tilman Klumpp, Xuejuan Su

In our model, production of a final good requires access to an excludable resource owned by an integrated firm. The quality of the resource depends on an investment by the owner and impacts the downstream demand curve. Under open access, the owner must share the resource with downstream competitors at a regulated tariff. We show that quality exceeds the monopoly level, and increases with the number of competitors, if the access tariff is set according to a principle we call revenue neutrality. Our results contradict the notion that dynamic efficiency must be sacrificed for gains in

static (allocative) efficiency. (JEL D21, D43, D45, L24, O34)

Are Speculators Unwelcome in Multi-object Auctions?

- American Economic Journal: Microeconomics---2010---Marco Pagnozzi

I consider a uniform-price auction under complete information. The possibility of resale attracts speculators who have no use value for the objects on sale. A high-value bidder may strictly prefer to let a speculator win some of the objects and then buy in the resale market, in order to keep the auction price low. Although resale induces entry by speculators and therefore increases the number of competitors, high-value bidders' incentives to "reduce demand" are also affected. Allowing resale to attract speculators reduces the seller's revenue when bidders' valuations are dispersed. Speculators increase the seller's revenue only when they are outbid. (JEL D44, D83)

Truthful Revelation Mechanisms for Simultaneous Common Agency Games

- American Economic Journal: Microeconomics---2010---Alessandro Pavan, Giacomo Calzolari

We introduce new revelation mechanisms for simultaneous common agency games which, although they do not always permit a complete equilibrium characterization, do facilitate the characterization of the equilibrium outcomes that are typically of interest in applications. We then show how these mechanisms can be used in applications such as menu auctions, competition in nonlinear tariffs, and moral hazard settings. Lastly, we show how one can enrich the revelation mechanisms, albeit at a cost of an increase in complexity, to characterize all possible equilibrium outcomes, including those sustained by non-Markov strategies and/or mixed-strategy profiles. (JEL C72, D82, D86)

Public Goods, Social Pressure, and the Choice between Privacy and Publicity

- American Economic Journal: Microeconomics---2010---Andrew Daughety, Jennifer Reinganum

We model privacy as an agent's choice of action being unobservable to others. An agent derives utility from his action, the aggregate of agents' actions, and other agents' perceptions of his type. If his action is unobservable, he takes his full-information optimal action and is pooled with other types, while if observable, then he distorts it to enhance others' perceptions of him. This increases the public good, but the disutility from distortion is a social cost. When the disutility of distortion is high (low) relative to the marginal utility of the public good, a policy of privacy (publicity) is optimal. (JEL D82, H41)

The Pricing of Academic Journals: A Two-Sided Market Perspective

- American Economic Journal: Microeconomics---2010---Doh-Shin Jeon, Jean Rochet

More and more academic journals are adopting an open access policy by which articles are accessible free of charge, while publication costs are recovered through author fees. We study the consequences of this open access policy on the quality standard of an electronic academic journal. If the journal's objective were to maximize social welfare, open access would be optimal. However, we show that if the journal has a different objective (such as maximizing readers' utility, the impact of the journal, or its profit), open access tends to induce it to choose a quality standard below the socially efficient level. (JEL L11, L82)

A Theory of Deception

- American Economic Journal: Microeconomics---2010---David Ettinger, Philippe Jehiel

This paper proposes an equilibrium approach to belief manipulation and deception in which agents only have coarse knowledge of their opponent's strategy. Equilibrium requires the coarse knowledge available to agents

to be correct, and the inferences and optimizations to be made on the basis of the simplest theories compatible with the available knowledge. The approach can be viewed as formalizing into a game theoretic setting a well documented bias in social psychology, the fundamental attribution error. It is applied to a bargaining problem, thereby revealing a deceptive tactic that is hard to explain in the full rationality paradigm. (JEL C78, D83, D84)

Investor Sentiments

- American Economic Journal: Microeconomics---2010---Sergei Izmalkov,Muhamet Yildiz

We consider a general class of games that have been used to model many economic problems where players' sentiments are believed to play an important role. Dropping the common prior assumption, we identify the relevant notion of sentiments for strategic behavior in these games. This notion is tied to how likely a player thinks that some other player has a more optimistic outlook than himself when they obtain their private information. Under this notion, we show that sentiments have a profound effect on strategic outcomes -- even with vanishing uncertainty. (JEL C73, D82, D83, G11)

An Experimental Test of Flexible Combinatorial Spectrum Auction Formats

- American Economic Journal: Microeconomics---2010---Christoph Brunner,Jacob Goeree,Charles Holt,John Ledyard

This paper reports laboratory experiments that evaluate the performance of a flexible package bidding format developed by the FCC, in comparison with other combinatorial formats. In general, the interest of policy makers in combinatorial auctions is justified by the laboratory data. When value complementarities are present, package bidding yields improved performance. We find clear differences among the combinatorial auction formats both in terms of efficiency and seller revenue, however. Notably, the combinatorial

clock provides the highest revenue. The FCC's flexible package bidding format performed worse than the alternatives, which is one of the main reasons why it was not implemented. (JEL D44, H82)

Noise, Information, and the Favorite-Longshot Bias in Parimutuel Predictions

- American Economic Journal: Microeconomics---2010---Marco Ottaviani,Peter Sørensen

According to the favorite-longshot bias, the expected return on an outcome tends to increase in the fraction of bets laid on that outcome. We derive testable implications for the direction and extent of the bias depending on the ratio of private information to noise present in the market. We link this ratio to observables such as the number of bettors, the number of outcomes, the amount of private information, the level of participation generated by recreational interest in the event, the divisibility of bets, the presence of ex post noise, as well as ex ante asymmetries across outcomes. (JEL D81, D83)

Social Reinforcement: Cascades, Entrapment, and Tipping

- American Economic Journal: Microeconomics---2010---Geoffrey Heal,Howard Kunreuther

The actions of different agents sometimes reinforce each other. Examples are network effects and the threshold models used by sociologists as well as (Harvey) Leibenstein's "bandwagon effects." We model such situations as a game with increasing differences, and show that tipping of equilibria, cascading, and clubs with entrapment are natural consequences of this mutual reinforcement. If there are several equilibria, one of which Pareto dominates, then the inefficient equilibria can be tipped to the efficient one, a result of interest in the context of coordination problems. We characterize the smallest tipping set. (JEL C72, D80, D85, Z13)

Information Percolation

- American Economic Journal: Microeconomics---2010---Darrell Duffie,Gaston Giroux,Gustavo

We study the "percolation" of information of common interest through a large market as agents encounter and reveal information to each other over time. We provide an explicit solution for the dynamics of the cross-sectional distribution of posterior beliefs. We also show that convergence of the cross-sectional distribution of beliefs to a common posterior is exponential and that the rate of convergence does not depend on the size of the groups of agents that meet. The rate of convergence is merely the mean rate at which an individual agent is matched. (JEL D83)

Naïve Learning in Social Networks and the Wisdom of Crowds

- American Economic Journal: Microeconomics---2010---Benjamin Golub,Matthew Jackson

We study learning in a setting where agents receive independent noisy signals about the true value of a variable and then communicate in a network. They naïvely update beliefs by repeatedly taking weighted averages of neighbors' opinions. We show that all opinions in a large society converge to the truth if and only if the influence of the most influential agent vanishes as the society grows. We also identify obstructions to this, including prominent groups, and provide structural conditions on the network ensuring efficient learning. Whether agents converge to the truth is unrelated to how quickly consensus is approached. (JEL D83, D85, Z13)

Optimal Sales Schemes against Interdependent Buyers

- American Economic Journal: Microeconomics---2010---Masaki Aoyagi

This paper studies a monopoly pricing problem when the seller can choose the timing of a trade with each buyer, and a buyer's valuation of the seller's good is the weighted sum of his and other buyers' private signals. We show that it is optimal for the seller to employ a sequential scheme that trades with one buyer at a

time and allows each buyer to observe the outcomes of all preceding transactions. We also identify conditions under which the seller optimally trades with the buyers in the increasing order of the weights they place on other buyers' signals. (JEL D42, D82, L12)

The 1/d Law of Giving

- American Economic Journal: Microeconomics---2010---Jacob Goeree,Margaret A. McConnell,Tiffany Mitchell,Tracey Tromp,Lea Yaviv

We combine survey data on friendship networks and individual characteristics with experimental observations from dictator games. Dictator offers are primarily explained by social distance, giving follows a simple inverse distance law. While student demographics play a minor role in explaining offer amounts, individual heterogeneity is important for network formation. In particular, we detect significant homophilous behavior; students connect to others similar to themselves. Moreover, the network data reveal a strong preference for cliques, students connect to those already close. The study is one of the first to identify network architecture with individual behavior in a strategic context. (JEL D44, H82)

The Strategic Value of Quantity Forcing Contracts

- American Economic Journal: Microeconomics---2010---David Martimort,Salvatore Piccolo

We explore the strategic value of quantity forcing contracts in a manufacturer-retailer environment under both adverse selection and moral hazard. Manufacturers dealing with (exclusive) competing retailers may prefer to leave contracts silent on retail prices, whenever other aspects of the retailers' activity remain nonverifiable. Two effects are at play when moving from retail price maintenance to quantity forcing. First, restricting screening possibilities may increase retailers' rent. Second, such a restriction affects downstream competition. This latter effect may justify using quantity forcing contracts and, more generally, shed light on a

novel source of contractual incompleteness. (JEL D82, D86, L14)

Competition, Monopoly Maintenance, and Consumer Switching Costs

- American Economic Journal: Microeconomics---2010---Hodaka Morita, Michael Waldman

Significant attention has been paid to why a durable goods producer with little or no market power would monopolize the maintenance market for its own product. This paper investigates an explanation for the practice based on consumer switching costs and the decision concerning maintaining versus replacing used units. In our explanation, if the maintenance market is not monopolized, consumers sometimes maintain used units that are more efficiently replaced. In turn, monopolizing the maintenance market avoids this inefficiency. In contrast to most previous explanations for the practice, in our explanation, the practice increases both social and consumer welfare. (JEL D42, D43, D82, K21, L12, L42)