Newsletter No. 11 — November 2013

SFB/TR 15 Seminars

Berlin

Date	Speaker (Institution)	Title
October 14	Karine Nyborg (University of Oslo)	The Gate is Open: Primary Care Physicians as Social Security Gatekeepers
October 21	Pierre Boyer (University of Mannheim)	Efficiency, Welfare, and Political Competition
October 28	Tadashi Hashimoto (Toulouse School of Economics)	The Generalized Random Priority Mechanism with Budgets
November 4	Johannes Münster (University of Cologne)	Centralized Bargaining in Press Wholesale

Mannheim

Date	Speaker (Institution)	Title
September 3	Xavier Vives (IESE Business School Barcelona)	R&D Cooperation, Spillovers and Antitrust Policy
September 10	Matthew Gentry (London School of Economics)	Entry and Competition in Takeover Auctions
September 17	Denis Gromb (INSEAD)	Legal Investor Protection and Takeovers
September 24	Toker Doganoglu (Universität Würzburg)	Incentives to Supply a Downstream Competitor: The Role of Contract Observability and Complexity
October 1	Eduardo Perez (Ecole Polytechnique)	Certiable Pre-Play Communication: Full Disclosure
October 8	Alon Eizenberg (Hebrew University)	Grab Them Before They Go Generic: Habit Formation and the Emerging Middle Class
October 15	Amit Gandhi (University of Wisconsin)	Estimating Demand for Differentiated Products with Error in Market Shares
October 22	Harald Fadinger (Universität Wien)	Vertical Offshoring with Heterogeneous Firms
October 29	Sanjeev Goyal (University of Cambridge)	Trading in Networks: Theory and Experiment

Munich

Date	Speaker (Institution)	Title
04. November 2013	Susann Fiedler (MPI Bonn)	"Investigating Cognitive Processes of Decision Making"
5. November 2013	Paola Giuliano (UCLA)	"Growing up in a Recession"
12. November 2013	Murat Iyigun (U Colorado)	"Changing the Rules Midway: The Impact of Granting Alimony Rights on Existing and Newly-Formed Partnerships"
18. November 2013	Benjamin Enke (Universität Bonn)	"tba"

| 25. November 2013 | Muriel Niederle (Stanford University) | "tba" |
| 26. November 2013 | Francesco Caselli (LSE) | "tba" |

Conferences Organized by SFB/TR15 Members

A4 (Schmidt)

Name	Topic	Dates
Klaus Schmidt	CESifo Conference on Behavioral Economics, Munich	October 25-26, 2013

C6 (Peitz/Stahl)

Name	Topic	Dates
Malin Arve, Martin Peitz, Lily Samkharadze	Workshop on procurement and contracts, Bad Homburg	October 16-October 18

External Research Visits, Lectures and Seminars of SFB/TR 15 Members

A2 (Konrad)

Name	Topic	Dates
Florian Morath	"Technology Transfers for Climate Change", CESifo Area Conference on Energy and Climate Economics, Munich	October 12

A4 (Schmidt)

Name	Topic	Dates
Klaus Schmidt	CESifo Conference on Behavioral Economics, Munich, "Reference Points, Social Norms, and Fairness in Contract Renegotiations"	October 25-26, 2013
Klaus Schmidt	University of Frankfurt, "Loss Aversion and Ex Post Inefficient Renegotiation"	November 27, 2013
Fabian Herweg	Aarhus University „Loss Aversion and Ex post Inefficient Renegotiation" (joint with Klaus Schmidt)	11.-13. November, 2013

A7 (Strausz/Wolfstetter)

Name	Topic	Dates
Roland Strausz	Workshop on Procurement and Contracts, Mannheim University, Bad Homburg	16-18 October 2013
Roland Strausz	Advances on the Political Economy of Conflict and Redistribution II, WZB Berlin	28-29 October 2013
Elmar Wolfstetter	Visiting professor at Korea University, Seoul	October - November

B5 (Schnitzer/Eckel)

Name	Topic	Dates
Kesternich, Iris	"Homo hippocraticus or homo oeconomics: On physician agency, distributional preferences and professional norms" (with Heiner Schumacher und Joachim Winter) at the CBSSM Seminar at the University of Michigan, USA	October 10, 2013
Kesternich, Iris	"Homo hippocraticus or homo oeconomics: On physician agency, distributional preferences and professional norms" (with Heiner Schumacher und Joachim Winter) at the Indiana University, Kelly School of Business, USA	October 4, 2013
Watzinger, Martin	" Do Government Investments Increase Employment in a Recession? Evidence from Germany" (joint with Lukas Buchheim) at the EEA in Göteborg, Sweden	August 30, 2013
Watzinger, Martin	"Contract Enforcement and R&D Investment" (joint with Michael Seitz) at the Annual Meeting of the Verein für Socialpolitik, Düsseldorf	September 5, 2013

C5 (Nocke)

Name	Topic	Dates
Volker Nocke	Research Visit to SciencesPo, Paris (Collaboration with Emeric Henry on "Merger Policy and Innovation")	June 16-27
Volker Nocke	Research Seminar CREST/Ecole Polytechnique, Paris (Talk: "Internal vs. External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy")	June 26
Volker Nocke	CRESSE Annual Conference on Competition and Regulation, Corfu (Talk: "Internal vs. External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy")	July 5-7
Volker Nocke	European Assocation for Resarch in Industrial Economics (EARIE), Annual Conference, Evora (Talk: "Internal vs. External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy")	August 30 - September 1
Volker Nocke	German Economic Association (Verein für Socialpolitik), Annual Meeting, Düsseldorf; Organization of "Kerntagung" (keynote lectures)	September 4-7
Volker Nocke	SEARLE Annual Conference on Antitrust Economics and Competition Policy, Chicago (Discussion of "All Units Discounts and Double Moral Hazard")	September 20-21
Volker Nocke	Research Seminar, CERGE-EI, Prague (Talk: "Exclusive Dealing and Vertical Integration in Interlocking Relationships")	October 2
Volker Nocke	Research Visit to Toulouse School of Economics (Collaboration with Patrick Rey on "Exclusive Dealing and Vertical Integration in Interlocking Relationships")	October 9-13
Volker Nocke	Research Seminar, Geneva Trade Workshop [University / Graduate Institute / WTO] (Talk: "Cross-Border Price Effects of Mergers and Acquisitions: A Framework for Competition Policy")	October 15

C6 (Peitz/Stahl)

Name	Topic	Dates
Raffaele Fiocco (to be coopted)	"Consumer standards as a strategic device to mitigate ratchet effects in dynamic regulation" , Research Seminar at Düsseldorf Institute for Competition Economics, DICE, Düsseldorf	May 2013
Konrad Stahl	ZEW and University of Mannheim, MaCCI –day, talk on "Market Transparency, Adverse Selection, and Moral Hazard"	May 2
Konrad Stahl	University College, London, talk on "Who Does (Should) Buy Certification – Buyers or Sellers?"	May 29
Konrad Stahl	Humboldt-University Berlin, cooperation with Leonardo Felli, Lars-Hendrik Röller and Roland Strausz	January 27 – February 1
Konrad Stahl	Research in Israel, cooperation with David Genesove, Shaul Lach, and Yossi Spiegel, talks at Tel Aviv University and Hebrew University, Jerusalem on "Market Transparency, Adverse Selection, and Moral Hazard"	November 11-25

C9 (Schmidt-Dengler/von Thadden)

Name	Topic	Dates
Yuya Takahashi	Stockholm School of Economics, "Estimating a Dynamic Game of Spatial Competition: The Case of the UK Supermarket Industry," with Pasquale Schiraldi and Howard Smith	September 11
Yuya Takahashi	Berlin IO Day, "Estimating a Dynamic Game of Spatial Competition: The Case of the UK Supermarket Industry," with Pasquale Schiraldi and Howard Smith.	September 27
Yuya Takahashi	EIEF Rome, "Estimating a Dynamic Game of Spatial Competition: The Case of the UK Supermarket Industry," with Pasquale Schiraldi and Howard Smith.	October 3
Isis Durrmeyer	Research visit in HEC Montreal, hosted by Mario Samano, project name : "CAFE standards vs Feebates"	July 15-July 27

Publications

A2 (Konrad)

Name	Topic	Dates
Dan Kovenock., Florian Morath and Johannes Münster	Information sharing in contests, Journal of Economics and Management Strategy	Forthcoming

A5 (Krähmer/Schweizer)

Name	Topic	Dates
Tim Friehe, Avraham Tabbach	"Judgment Proofness and the Choice between Monetary and Nonmonetary Care", Journal of Institutional and Theoretical Economics, forthcoming	
Urs Schweizer	"Damages Regimes, Precaution Incentives, and the Intensity Principle", Journal of Institutional and Theoretical Economics, forthcoming, DOI: 10.1628/093245613X671247.	Published Online September 19

A7 (Strausz/Wolfstetter)		
Name	**Topic**	**Dates**
Raffaele Fiocco, Roland Strausz	"Consumer Standards as a Strategic Device to Mitigate Ratchet Effects in Dynamic Regulation" accepted for publication in Journal of Economics & Management Strategy	Forthcoming
Ludwig Ensthaler, Thomas Giebe, Jianpei Li	"Speculative Partnership Dissolution with Auctions" accepted for publication in Review of Economic Design, forthcoming (http://dx.doi.org/10.1007/s10058-013-0154-x)	Forthcoming
Matthias Lang, Christian Seel, Philipp Strack	"Deadlines in Stochastic Contests", accepted for publication in Journal of Mathematical Economics (http://dx.doi.org/10.1016/j.jmateco.2013.10.003)	Forthcoming
C5 (Nocke)		
Name	**Topic**	**Dates**
Andras Niedermayer (with Jianjun Wu)	Breaking Up a Research Consortium, with Jianjun Wu, International Journal of Industrial Organization, Volume 31, Issue 4, July 2013, 342-353	July 2013
Andras Niedermayer	"On Platforms, Incomplete Contracts, and Open Source Software", the International Journal of Industrial Organization	forthcoming
Andras Niedermayer (with Artyom Shneyerov)	For-Profit Search Platforms, with Art Shneyerov, International Economic Review	accepted
C6 (Peitz/Stahl)		
Name	**Topic**	**Dates**
Raffaele Fiocco (with Roland Strausz)	"Consumer standards as a strategic device to mitigate ratchet effects in dynamic regulation", Journal of Economics and Management Strategy	Forthcoming
Raffaele Fiocco	"The optimal institutional design of vertically related markets with unknown upstream costs", Review of Network Economics, 12 (2) 183–210	2013

Miscellaneous

C5 (Nocke)		
Name	**Topic**	**Dates**
Christian Michel	Christian Michel (Project C5) was awarded the Reinhard-Selten-Prize of the German Economic Association for his paper "Identification and Estimation of Intra-Firm and Industry Competition via Ownership Change"	September

New/Leaving Staff

C5 (Nocke)		
Name	**Topic**	**Dates**
Christian Michel	Christian Michel is leaving the SFB-TR15 (Project C5) for a tenure-track assistant professorship at Universitat Pompeu Fabra (Barcelona)	September
Volker Nocke	Volker Nocke was elected a member of the Council of the European Economic Association (term: 5 years from January 1, 2014)	October

New Discussion Papers

C5 (Nocke)		
Name	**Title**	**Number**
Volker Nocke, Stephen Yeaple	**Globalization and Multiproduct Firms** **Abstract:** We present an international trade model with multiproduct firms. Firms are heterogeneously endowed with two types of capabilities that jointly determine the trade-off within firms between managing a large portfolio of products and producing at low marginal cost. The model can explain many of the documented cross-sectional correlations in firm performance measures, including why larger firms are more productive and more diversified, and yet more diversified firms trade at a discount. Globalization is shown to induce heterogeneous responses across firms in terms of scope and productivity, some of which are consistent with existing empirical work, while others are potentially testable. *Keywords:* multiproduct firms, trade liberalization, diversification discount, firm heterogeneity, productivity *JEL Classification:* F12, F15	408

C5 (Nocke)

Name	Title	Number
Christian Michel	**Identification and Estimation of Intra-Firm and Industry Competition via Ownership Change** **Abstract:** This paper proposes and empirically implements a framework for analyzing industry competition and the degree of joint profit maximization of merging firms in differentiated product industries. Using pre- and post-merger industry data, I am able to separate merging firms' intra-organizational pricing considerations from industry pricing considerations. The insights of the paper shed light on a long-standing debate in the theoretical literature about the consequences of organizational integration. Moreover, I propose a novel approach to directly estimate industry conduct that relies on ownership changes and input price variation. I apply my framework using data from the ready-to-eat cereal industry, covering the 1993 Post-Nabisco merger. My results show an increasing degree of joint profit maximization of the merged entities over the first two years after the merger, eventually leading to almost full maximization of joint profits. I find that between 14.3 and 25.6 percent of industry markups can be attributed to cooperative industry behavior, while the remaining markup is due to product differentiation of multi-product firms. *Keywords:* Identification of Market Structure, Post-merger Internalization of Profits, Conduct Estimation, Ex-post Merger Evaluation, Estimation of Synergies	409

B4 (Kräkel)

Name	Title	Number
Matthias Kräkel, Daniel Müller	**Merger Efficiency and Managerial Incentives** **Abstract:** We consider a two-stage principal-agent model with limited liability in which a CEO is employed as agent to gather information about suitable merger targets and to manage the merged corporation in case of an acquisition. Our results show that the CEO systematically recommends targets with low synergies—even when targets with high synergies are available—to obtain high-powered incentives and, hence, a high personal income at the merger-management stage. We derive conditions under which shareholders prefer a self-commitment policy or a rent-reduction policy to deter the CEO from opportunistic recommendations. *JEL classification:* D82; D86; G34 *Keywords:* acquisition; merger; moral hazard	410

B4 (Kräkel)

Name	Title	Number
Lorens Imhof, Matthias Kräkel	**Tournaments with Gaps** **Abstract:** A standard tournament contract specifies only tournament prizes. If agents' performance is measured on a cardinal scale, the principal can complement the tournament contract by a gap which defines the minimum distance by which the best performing agent must beat the second best to receive the winner prize. We analyze a tournament with two risk averse agents. Under unlimited liability, the principal strictly benefits from a gap by partially insuring the agents and thereby reducing labor costs. If the agents are protected by limited liability, the principal sticks to the standard tournament. *Keywords:* limited liability; moral hazard; risk aversion; tournament; unlimited liability. JEL classification: C72; D86.	411

B4 (Kräkel)

Name	Title	Number
Matthias Kräkel	**Authority and Incentives in Organizations** **Abstract:** The paper analyzes the choice of organizational structure as solution to the trade-off between controlling behavior based on authority rights and minimizing costs for implementing high efforts. The analysis includes the owner of a firm, a top manager and two division heads. If it is more expensive to incentivize the division heads, the owner will prefer full delegation of authority to them to replace their high incentive pay by incentives based on private benefits of control. In that situation, decentralization is optimal given that selfish behavior is more important than cooperation for maximizing returns, but concentrated delegation of full authority to a single division head is optimal for cooperation being crucial. If, however, incentivizing the division heads is clearly less expensive than creating incentives for the top manager, the owner will choose centralization given that cooperation is the dominating issue, but partial delegation if selfish behavior is crucial. *Keywords:* authority, centralization, contracts, decentralization, moral hazard. *JEL classification:* D21, D23, D86, L22.	412

B4 (Kräkel)

Name	Title	Number
Lorens Imhof, Matthias Kräkel	**Bonus Pools and the Informativeness Principle** **Abstract**: Previous work on moral-hazard problems has shown that, under certain conditions, bonus contracts create optimal individual incentives for risk-neutral workers. In our paper we demonstrate that, if a firm employs at least two workers, it may further bene.t from combining worker compensation via a bonus-pool contract and relative performance evaluation. Such combination leads to saved rents under a wide class of luck distributions. In addition, if the employer is wealth-constrained, complementing individual bonus contracts by the possibility of pooling bonuses can increase the set of implementable effort levels. All our results hold even though workers' outputs are technically and stochastically independent so that, in view of Holmstrom's informativeness principle, individual bonus contracts would be expected to dominate bonus-pool contracts. *Keywords:* contract; hazard rate; informativeness principle; limited liability; relative performance *JEL classification:* C72; D86.	413

B4 (Kräkel)

Name	Title	Number
Matthias Kräkel, Nora Szech, Frauke von Bieberstein	**Externalities in Recruiting** **Abstract:** External recruiting at least weakly improves the quality of the pool of applicants, but the incentive implications are less clear. Using a contest model, this paper investigates the pure incentive effects of external recruiting. Our results show that if workers are heterogeneous, the opening of a firm's career system may lead to a homogenization of the pool of contestants and, thus, encourage the firm's high ability workers to exert more effort. If this positive effect outweighs the discouragement of low ability workers, the firm will benefit from external recruiting. If, however, the discouragement effect dominates the homogenization effect, the firm should disregard external recruiting. In addition, product market competition makes opening of the career system less attractive for a firm since it increases the incentives of its competitors' workers and hence strengthens the competitors. *Keywords:* contest; externalities; recruiting; wage policy. *JEL Classification:* C72; J2; J3.	414

C2 (Harhoff/Peitz)

Name	Title	Number
Ilja Rudyk	**The License of Right, Compulsory Licensing and the Value of Exclusivity** **Abstract:** This paper uses the License of Right (LOR) provision implemented in Section 23 of the German Patent Act to answer the following questions: What is the distribution of the private value of the right to exclude others provided by a patent? What are the welfare implications of having a License of Right system? Section 23 of the German Patent Act grants a patentee a 50% reduction on the annual renewal fees if he voluntarily allows anyone to use the invention only in return for reasonable compensation. We build a parametric discrete choice model of patent renewal and LOR declaration to exploit data on granted German patent applications from 1983-1988. Our estimates show that the distribution of the value of the right to exclude others is very skewed and its relative importance rises with patent age. For most patent owners the exclusion right is very valuable. Nevertheless, for a small fraction of patents a commitment to license non-exclusively may even increase the returns from patent protection. The welfare implications of the License of Right system in Germany are twofold. It increases the private value of patent rights but lowers the patent office's revenues. Furthermore, we are able to distinguish between two motives for declaring LOR, the cost-saving and the commitment motive. The fraction of declarations made out of the cost-saving motive is relatively low for young patents but increasing with patent age. In a counterfactual experiment we simulate the impact of making LOR declarations compulsory. We show that a compulsory licensing system could deprive the patent owners of a very substantial part of the incentives currently provided by the patent system. *Keywords:* value of exclusivity, patent valuation, license of right, compulsory licensing, patent renewal model	415

C2 (Harhoff/Peitz)

Name	Title	Number
Ilja Rudyk	**Deferred Patent Examination** **Abstract:** Most patent systems allow applicants to defer patent examination by some time. Deferred examination was introduced in the 1960s, first at the Dutch patent office and subsequently in many other countries, as a response to mounting backlogs of unexamined patent applications. Some applicants allow the examination option to lapse and never request examination once they learn about the value of their invention. Examination loads are reduced substantially in these systems, albeit at the cost of having a large number of pending patent applications. Economic models of patent examination and renewal have largely ignored this important feature to date. We construct a model of patent application, examination and renewal in which applicants have control over the timing of examination and study the tradeoffs that applicants face. Using data from the Canadian patent office and a simulated GMM estimator, we obtain estimates for parameter values of the value distributions and of the learning process. We use our estimates to assess the value of Canadian patents as well as applications. We find that a considerable part of the value is realized before a patent is even granted. In addition, we simulate the counterfactual impact of changes in the deferment period. The estimates we obtain for the value of one additional year of deferment are relatively high and may explain why some applicants embark on delay tactics (such as continuations or divisionals) in patent systems without a statutory deferment option. *Keywords:* patent, patent value, value of patent applications, patent examination, deferred patent examination	416

A3 (Moldovanu)

Name	Title	Number
Alex Gershkov, Benny Moldovanu, Xianwen Shi	**Optimal Voting Rules** **Abstract:** We study dominant strategy incentive compatible (DIC) and deterministic mechanisms in a social choice setting with several alternatives. The agents are privately informed about their preferences, and have single-crossing utility functions. Monetary transfers are not feasible. We use an equivalence between deterministic, DIC mechanisms and generalized median voter schemes to construct the constrained-efficient, optimal mechanism for an utilitarian planner. Optimal schemes for other welfare criteria such as, say, a Rawlsian maximin can be analogously obtained.	417

A2 (Konrad)		
Name	**Title**	**Number**
Kai A. Konrad, Florian Morath	**Evolutionary determinants of war** **Abstract:** This paper considers evolutionarily stable decisions about whether to initiate violent conflict rather than accepting a peaceful sharing outcome. Focusing on small sets of players such as countries in a geographically confined area, we use Schaffer's (1988) concept of evolutionary stability. We find that players 'evolutionarily stable preferences widen the range of peaceful resource allocations that are rejected in favor of violent conflict, compared to the Nash equilibrium outcomes. Relative advantages in fighting strength are reflected in the equilibrium set of peaceful resource allocations. *Keywords:* Conflict; Contest; Endogenous fighting; Balance of power; Evolutionary stability *JEL Codes:* D72; D74	418

A2 (Konrad)		
Name	**Title**	**Number**
Luisa Herbst, Kai A. Konrad, Florian Morath	**Endogenous group formation in experimental contests** **Abstract:** We study endogenous group formation in tournaments employing experimental three-player contests. We find that players in endogenously formed alliances cope better with the moral hazard problem in groups than players who are forced into an alliance. Also, players who are committed to expending effort above average choose to stand alone. If these players are forced to play in an alliance, they invest even more, whereas their co-players choose lower effort. Anticipation of this exploitation may explain their preference to stand alone. *Keywords:* Endogenous group formation, contest, conflict, alliance, experiment, moral hazard problem, free-riding, in-group favoritism *JEL codes:* D72, D74	419

A2 (Konrad)		
Name	**Title**	**Number**
Changxia Ke, Kai A. Konrad, Florian Morath	**Alliances in the Shadow of Conflict** **Abstract:** Victorious alliances often fight about the spoils of war. This paper presents an experiment on the determinants of whether alliances break up and fight internally after having defeated a joint enemy. First, if peaceful sharing yields an asymmetric rent distribution, this increases the likelihood of fighting. In turn, anticipation of the higher likelihood of internal fight reduces the alliance's ability to succeed against the outside enemy. Second, the option to make non-binding declarations on non-aggression in the relationship between alliance members does not make peaceful settlement within the alliance more likely. Third, higher differences in the alliance players' contributions to alliance effort lead to more internal conflict and more intense fighting. *Keywords:* Conflict; Contest; Alliance; Endogenous internal conflict; Hold-up problem; Non-aggression pact; Experiment JEL Codes: D72; D74	420

A2 (Konrad)

Name	Title	Number
Changxia Ke	**Fight Alone or Together? The Need to Belong** **Abstract:** Alliances often face both free‑riding and hold‑up problems, which under‑ mine the effectiveness of alliances in mobilizing joint fighting effort. Despite of these disadvantages, alliances are still ubiquitous in all types of contests. This paper asks if there are non‑monetary incentives to form alliances, e.g., intimidating/discouraging the single player(s) who is/are left alone. For this purpose, I compare symmetric (2 vs. 2) and asymmetric (2 vs. 1) contests to their equivalent 4‑player and 3‑player individual contests, respectively. We find that alliance players in symmetric (2 vs. 2) contests behave the same as those in equivalent 4‑player individual contests. However, in asymmetric (2 vs. 1) contests, stand‑alone players were strongly discouraged to exert effort (especially the females), compared to the 3‑player individual contests. Alliance players may have anticipated this effect and also reduced their effort, if alliances share the prize according to the merit rule. Behavioural factors such as the need to belong can help reconcile the "paradox of alliance formation". *Keywords:* Alliance Formation, Contest and Conflict, Experiment. *JEL Codes:* D72; D74; C91	421

C9 (von Thadden/Schmidt-Dengler)

Name	Title	Number
Xavier D'Haultfoeuille, Isis Durrmeyer, Philippe Février	**The Effect of Public Policies on Consumers' Preferences: Lessons from the French Automobile Market** **Abstract:** In this paper, we investigate whether French consumers have modified their preferences towards environmentally‑friendly vehicles between 2003 and 2008. We estimate a model of demand for automobiles incorporating both consumers' heterogeneity and CO_2 emissions of the vehicles. Our results show that there has been a shift in preferences towards low‑emitting cars, with an average increase of 367 euros of the willingness to pay for a reduction of 10 grams of carbon dioxide per kilometer. We also stress a large heterogeneity in the evolution of preferences between consumers. Rich and young people are more sensitive to environmental issues, and our results are in line with votes for the green party at the presidential elections. We relate these changes with two environmental policies that were introduced at these times, namely the obligation of indicating energy labels by the end of 2005 and a feebate based on CO_2 emissions of new vehicles in 2008. Our results suggest that such policies have been efficient tools to shift consumers utility towards environmentally‑friendly goods, the shift in preferences accounting for 20% of the overall decrease in average CO_2 emissions of new cars on the period. *Keywords:* environmental policy, consumers' preferences, CO_2 emissions, automobiles. *JEL codes:* D12, H23, L62, Q51.	422

C9 (von Thadden/Schmidt-Dengler)

Name	Title	Number
Taisuke Otsu, Martin Pesendorfer, Yuya Takahashi	**Testing for Equilibrium Multiplicity in Dynamic Markov Games** **Abstract:** This paper proposes several statistical tests for finite state Markov games to examine the null hypothesis that the data are generated from a single equilibrium. We formulate tests of (i) the conditional choice probabilities, (ii) the steady-state distribution of states and (iii) the conditional distribution of states conditional on an initial state. In a Monte Carlo study we find that the chi-squared test of the steady-state distribution performs well and has high power even with a small number of markets and time periods. We apply the chi-squared test to the empirical application of Ryan (2012) that analyzes dynamics of the U.S. Portland Cement industry and test if his assumption of single equilibrium is supported by the data. *Keywords:* Dynamic Markov Game, Multiplicity of Equilibria, Testing. *Jel Classification:* C12, C72, D44.	423

C9 (von Thadden/Schmidt-Dengler)

Name	Title	Number
Yuya Takahashi	**Estimating a War of Attrition: The Case of the U.S. Movie Theater Industry** **Abstract:** This paper provides a tractable empirical framework to analyze firm behavior in a dynamic oligopoly when demand is declining over time. I modify Fudenberg and Tirole (1986).s model of exit in a duopoly with incomplete information to a model that can be used in an oligopoly, and combine this with an auxiliary entry model to address the initial conditions problem. I estimate this model with panel data on the U.S. movie theater industry from 1949 to 1955, using variations in TV diffusion rates across households, market structure before the exit game starts, and other market characteristics to identify the parameters in the theater's payoff function and the distribution of unobservable fixed costs. Using the estimated model, I measure strategic delays in the exit process due to oligopolistic competition and incomplete information. The delay in exit that arises from strategic interaction is 2.7 years on average. Out of these years, 3.7% of this delay is accounted for by incomplete information, while the remaining 96.3% is explained by oligopolistic competition.	424

B4 (Kräkel)

Name	Title	Number
Matthias Kräkel, Petra Nieken	**Relative Performance Pay in the Shadow of Crisis** **Abstract:** We analyze whether incentives from relative performance pay are reduced or enhanced if a department is possibly terminated due to a crisis. Our benchmark model shows that incentives decrease in a severe crisis, but are boosted given a minor crisis since efforts are strategic complements in the former case but strategic substitutes in the latter one. We tested our predictions in a laboratory experiment. The results confirm the effort ranking but show that in a severe crisis individuals deviate from equilibrium significantly stronger than in other situations. This behavior contradicts the benchmark model and leads to a five times higher survival probability of the department. We develop a new theoretical approach that may explain players' behavior. *Keywords:* crisis; incentives; strategic complements; strategic substitutes; tournament JEL Classification: C9; J3; J6; M5	425

C6 (Peitz/Stahl)

Name	Title	Number
Tobias J. Klein, Christian Lambertz, Konrad O. Stahl	**Market Transparency, Adverse Selection, and Moral Hazard** **Abstract:** We study the effects of improvements in market transparency on eBay on seller exit and continuing sellers' behavior. An improvement in market transparency by reducing strategic bias in buyer ratings led to a significant increase in buyer valuation especially of sellers rated poorly prior to the change, but not to an increase in seller exit. When sellers had the choice between exiting—a reduction in adverse selection—and improved behavior—a reduction in moral hazard—, they preferred the latter because of lower cost. Increasing market transparency improves on market outcomes. *JEL classification:* D47, D83, L15. *Keywords:* Anonymous markets, adverse selection, moral hazard, reputation building mechanisms, market transparency, market design.	426

A5 (Krähmer/Schweizer)

Name	Title	Number
Eugen Kovac, Daniel Krähmer	**Optimal Sequential Delegation** **Abstract:** The paper extends the optimal delegation framework pioneered by Holmström (1977, 1984) to a dynamic environment where, at the outset, the agent privately knows his ability to interpret decision relevant private information received later on. We show that any mechanism can be implemented by a sequential menu of delegation sets where the agent first picks a delegation set and then chooses an action within this set. For the uniform-quadratic case, we characterize when sequential delegation is strictly better than static delegation and derive the optimal delegation menu. We provide sufficient conditions so that our results extend beyond the uniform distribution. *Keywords:* optimal delegation, sequential screening, dynamic mechanism design, non-transferable utility *JEL classification:* D02, D20, D82, D86.	427

A5 (Krähmer/Schweizer)

Name	Title	Number
Urs Schweizer	**Acquisition and Disclosure of Information as a Hold-up Problem** **Abstract:** The acquisition of information prior to sale gives rise to a hold-up situation quite naturally. Yet, while the bulk of the literature on the hold-up problem considers negotiations under symmetric information where cooperative short-cuts such as split the difference capture the outcome of bargaining, in the present setting, parties negotiate under asymmetric information where the outcome must be derived from a non-cooperative bargaining procedure. To avoid the difficult task of specifying and solving complicated games combining elements of signalling and screening, but to still compare incentives for acquiring information under voluntary versus mandatory disclosure, use of conditions such as incentive, disclosure and participation constraints only is made that are common to all non-cooperative bargaining outcomes. *Keywords:* mistake, information acquisition, disclosing information *JEL classification:* K12, K13	428

A5 (Krähmer/Schweizer)

Name	Title	Number
Stefan Terstiege	**Precontractual Investigation and Sequential Screening** **Abstract:** Should contract design induce an agent to conduct a precontractual investigation even though, in any case, the agent will become fully informed after the signing of the contract? This paper shows that imperfect investigations might be encouraged. The result stands in contrast to previous studies, which focus on perfect investigations. The contrast exists because if precontractual investigation is perfect, the benefits of sequential screening vanish. *Keywords:* Principal agent, information acquisition, sequential screening *JEL classification:* D82, D83, D86	429

A5 (Krähmer/Schweizer)

Name	Title	Number
Stefan Terstiege	**Objective versus Subjective Performance Evaluations** **Abstract:** Why does incentive pay often depend on subjective rather than objective performance evaluations? After all, subjective evaluations entail a credibility issue. While the most plausible explanation for this practice is lack of adequate objective measures, I argue that subjective evaluations might sometimes also be used to withhold information from the worker. I furthermore argue that withholding information is particularly important under circumstances where the credibility issue is small. The statements are derived from a two-stage principal-agent model in which the stochastic relationship between effort and performance is unknown. *Keywords:* Performance evaluation, principal-agent, moral hazard *JEL Codes:* D83, D86, M12, M52	430

C9 (von Thadden/Schmidt-Dengler)

Name	Title	Number
Naoki Wakamori, Angelika Welte	**Why Do Shoppers Use Cash? Evidence from Shopping Diary Data** **Abstract:** Recent studies find that cash remains a dominant payment choice for small-value transactions despite the prevalence of alternative methods of payment such as debit and credit cards. For policy makers an important question is whether consumers truly prefer using cash or merchants restrict card usage. Using unique shopping diary data, we estimate a payment choice model with individual unobserved heterogeneity (demandside factors) while controlling for merchants' acceptance of cards (supply-side factors). Based on a policy simulation where we impose universal card acceptance among merchants, we find that overall cash usage would decrease by only 7.7 percentage points, implying that cash usage in small-value transactions is driven mainly by consumers' preferences. *Keywords:* Money demand, Payment methods, Consumer financial behavior *JEL Classification:* G2, D1, C2	431

C9 (von Thadden/Schmidt-Dengler)

Name	Title	Number
Salvador Navarro, Yuya Takahashi	**A Semiparametric Test of Agent's Information Sets for Games of Incomplete Information** **Abstract:** We propose semiparametric tests of misspecification of agent's information for games of incomplete information. The tests use the intuition that the opponent's choices should not predict a player's choice conditional on the proposed information available to the player. The tests are designed to check against some commonly used null hypotheses (Bajari et al. (2010), Aradillas-Lopez (2010)). We show that our tests have power to discriminate between common alternatives even in small samples. We apply our tests to data on entry in the US airline industry. Both the assumptions of independent and correlated private shocks are not supported by the data.	432

C9 (Schmidt-Dengler/von Thadden)

Name	Title	Number
Andras Niedermayer (with Jianjun Wu)	**Breaking Up a Research Consortium** **Abstract:** Inter-firm R&D collaborations through contractual arrangements have become increasingly popular, but in many cases they are broken up without any joint discovery. We provide a rationale for the breakup date in R&D collaboration agreements. More specifically, we consider a research consortium initiated by a firm A with a firm B. B has private information about whether it is committed to the project or a free-rider. We show that under fairly general conditions, a breakup date in the contract is a (secondbest) optimal screening device for firm A to screen out free-riders. With the additional constraint of renegotiation proofness, A can only partially screen out free-riders: entry by some free-riders makes sure that A does not have an incentive to renegotiate the contract ex post. We also propose empirical strategies for identifying the three likely causes of a breakup date: adverse selection, moral hazard, and project non-viability. *Keywords:* Optimal R&D contracts, adverse selection, breakup date, R&D collaboration *JEL-Classification:* C72, D82, L20	433

C9 (Schmidt-Dengler/von Thadden)

Name	Title	Number
Andras Niedermayer (with Simon Loertscher)	**Fee-Setting Mechanisms: On Optimal Pricing by Intermediaries and Indirect Taxation** **Abstract:** Mechanisms according to which private intermediaries or governments charge transaction fees or indirect taxes are prevalent in practice. We consider a setup with multiple buyers and sellers and two-sided independent private information about valuations. We show that any weighted average of revenue and social welfare can be maximized through appropriately chosen transaction fees and that in increasingly thin markets such optimal fees converge to linear fees. Moreover, fees decrease with competition (or the weight on welfare) and the elasticity of supply but decrease with the elasticity of demand. Our theoretical predictions fit empirical observations in several industries with intermediaries. *Keywords*: brokers, applied mechanism design, linear commission fees, optimal indirect mechanisms, auction houses. *JEL-Classification*: C72, C78, L13	434

C9 (Schmidt-Dengler/von Thadden)

Name	Title	Number
Andras Niedermayer (with Simon Loertscher)	**Assessing the Performance of Simple Contracts Empirically: The Case of Percentage Fees** **Abstract:** This paper estimates the cost of using simple percentage fees rather than the broker optimal Bayesian mechanism, using data for real estate transactions in Boston in the mid-1990s. This counterfactual analysis shows that intermediaries using the best percentage fee mechanisms with fees ranging from 5.4% to 7.4% achieve 85% or more of the maximum profit. With the empirically observed 6% fees intermediaries achieve at least 83% of the maximum profit and with an optimally structured linear fee, they achieve 98% or more of the maximum profit. *Keywords*: brokers, simple mechanisms, percentage fees, real estate brokerage. *JEL-Classification*: C72, C78, L13	435

C9 (Schmidt-Dengler/von Thadden)

Name	Title	Number
Andras Niedermayer (with Artyom Shneyerov)	**For-Profit Search Platforms** **Abstract:** We consider optimal pricing by a profit-maximizing platform running a dynamic search and matching market. Buyers and sellers enter in cohorts over time, meet and bargain under private information. The optimal centralized mechanism, which involves posting a bid-ask spread, can be decentralized through participation fees charged by the intermediary to both sides. The sum of buyers' and sellers' fees equals the sum of inverse hazard rates of the marginal types and their ratio equals the ratio of buyers' and sellers' bargaining weights. We also show that a monopolistic intermediary in a search market ay be welfare enhancing. *Keywords*: Dynamic random matching, two-sided private information, intermediaries *JEL Codes*: D82, D83	436

A1 (Bester/Tröger)

Name	Title	Number
Tymofiy Mylovanov, Thomas Tröger	**Mechanism Design by an Informed Principal: The Quasi- Linear Private-Values Case** **Abstract:** We show that, in environments with independent private values and transferable utility, a privately informed principal can implement a contract that is ex-ante optimal for her. As an application, we consider a bilateral exchange environment (Myerson and Satterthwaite, 1983) in which the principal is one of the traders. If the property rights over the good are dispersed among the traders, the principal will implement a contract in which she is almost surely better off than if there were no uncertainty about her information. The optimal contract is a combination of a participation fee, a buyout option for the principal, and a resale stage with posted prices and, hence, is a generalization of the posted price that would be optimal if the principal's valuation were commonly known. We also provide a condition under which the principal implements the same contract regardless of whether the agents know her information or not.	437

A1 (Bester/Tröger)

Name	Title	Number
Peter Vida (with Karl Schlag)	**Commitments, Intentions, Truth and Nash Equilibria** **Abstract:** Games with multiple Nash equilibria are believed to be easier to play if players can communicate. We present a simple model of communication in games and investigate the importance of when communication takes place. Sending a message before play captures talk about intentions, after play captures talk about past commitments. We focus on equilibria where messages are believed whenever possible. Applying our results to Aumann's Stag Hunt game we find that communication is useless if talk is about commitments, while the efficient outcome is selected if talk is about intentions. This confirms intuition and empirical findings in the literature. *Keywords:* Pre-play communication, cheap talk, coordination. *JEL Classification Numbers:* C72, D83.	438

C5 (Nocke)

Name	Title	Number
Nicolas Schutz	**Competition with Exclusive Contracts in Vertically Related Markets: An Equilibrium Non-Existence Result** **Abstract:** I develop a model in the spirit of Ordover, Saloner, and Salop (1990), in which two upstream firms compete to supply a homogeneous input to two downstream firms, who compete in prices with differentiated products in a downstream market. Upstream firms are allowed to offer exclusive two-part tariff contracts to the downstream firms. I show that, under very general conditions, this game does not have a subgame-perfect equilibrium in pure strategies. The intuition is that variable parts in such an equilibrium would have to be pairwise-proof. But when variable parts are pairwise-proof, downstream competitive externalities are not internalized, and there exists a profitable deviation. I contrast this non-existence result with earlier papers that found equilibria in similar models.	439

C5 (Nocke)

Name	Title	Number
Johan Hombert, Jérôme Pouyet, Nicolas Schutz	**Anticompetitive Vertical Merger Waves** **Abstract:** We develop a model of vertical merger waves leading to input foreclosure. When all upstream firms become vertically integrated, the input price can increase substantially above marginal cost despite Bertrand competition in the input market. Input foreclosure is easiest to sustain when upstream market shares are the most asymmetric (monopoly-like equilibria) or the most symmetric (collusive-like equilibria). In addition, these equilibria are more likely when (i) mergers generate strong synergies; (ii) price discrimination in the input market is not allowed; (iii) contracts are public; whereas (iv) the impact of upstream and downstream industry concentration is ambiguous.	440

C6 (Peitz/Stahl)

Name	Title	Number
Malin Arve	**Procurement and Predation: Dynamic Sourcing from Financially Constrained Suppliers** **Abstract:** This paper studies the interaction between financially constrained and financially strong firms on a procurement market. It characterizes and discusses a procurement agency's optimal response when faced with financially asymmetric firms. By considering a dynamic setting, both present and future consequences and incentives are taken into account. *JEL Classification:* D82, G30, H57. *Keywords:* Asymmetric information, Dual sourcing, Favoritism, Financial constraints, Procurement.	441

A1 (Bester/Tröger)

Name	Title	Number
Takakazu Honryo	**Signaling Competence in Elections** **Abstract:** We analyze how political candidates can signal their competence and show that polarization might be a way of doing this. For this purpose, we study a unidimensional Hotelling-Downs model of electoral competition in which a fraction of candidates have the ability to correctly observe a policy-relevant state of the world. We show that candidates tend to polarize, even in the absence of policy bias. This is because proposing an extreme platform has a competence signaling effect and has a strictly higher probability of winning than proposing a median platform. The degree of polarization depends on how uncertain is the state of the world.	442

B4 (Kräkel)

Name	Title	Number
Jörg Budde, Christian Hofmann	**Dynamic Bonus Pools** **Abstract:** We analyze a two-period agency problem with limited liability and nonverifiable information. The principal commits to a dynamic bonus pool comprising a fixed total payment that may be distributed over time to the agent and a third party. We find that the optimal two-period contract features memory. If the agent succeeds in the first-period, second-period incentives are weakened whereas higher-powered incentives are provided if he fails. The two-period bonus pool offers a complementary reason for why third-party payments are not commonly observed in practice.	443

B4 (Kräkel)

Name	Title	Number
Jörg Budde	**Good news and bad news in subjective performance evaluation** **Abstract:** Earlier studies show that contracts under subjective performance evaluation are dichotomous and punish only worst performance. I show that with limited liability payments need not be binary. More importantly, if the agent earns a rent from limited liability, the optimal contract distinguishes only signals of good news and bad news of the agent's action. *Keywords:* bonus, monotone likelihood ratio, wage compression *JEL classification numbers:* D82, M52, M54	444

B4 (Kräkel)

Name	Title	Number
Jörg Budde	**Verifiable and Nonverifiable Information in a Two-Period Agency Problem** **Abstract:** I examine how a firm's opportunity to verify information influences the joint use of verifiable and unverifiable information for incentive contracting. I employ a simple two-period agency model, in which contract frictions arise from limited liability and the potential unverifiability of the principal's information about the agent's action. With short-term contract, the principal benefits from both a more informative and a more conservative verification of his private information. With long-term contracts, he may prefer a less informative verification, but his preference for a conservative verification persists.	445