2<sup>nd</sup> Japanese-German Workshop on Contracts and Incentives

September 13-14, 2019

LMU Munich

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## Workshop Program

#### September 13 10:00 - 10:10 Welcome and introductory remarks 10:10 - 10:50 Takashi Shimizu (Kobe) "How to Really Open the Door: An Economic Analysis on the Risk of Voice" 10:50 - 11:30 Martin Pollrich (Bonn) "Sweet Lemons: Mitigating Collusion in Organizations" (with Colin von Negenborn) Coffee break 11:30 - 11:50 11:50 - 12:30 Si Chen (Bonn) "Knowing Enough to Think You Are Moral: Information Acquisition and Other-Regarding Preferences" (with Carl Heese) Simeon Schudy (LMU Munich) 12:30 - 13:10 "A Field Experiment on Leadership and Team Performance in Non-Routine Analytical Team Tasks" (with Florian Englmaier, Stefan Grimm, Dominik Grothe, and David Schindler) 13:10 - 14:30 Lunch break 14:30 - 15:10 Akifumi Ishihara (Tokyo) "Formal and Informal Authority in Organizations for Choice and Execution" (with Shintaro Miura) 15:10 - 15:50 Francesc Dilmé (Bonn) "Relational Contracts: Public versus Private Savings" (with Daniel Garrett) Coffee break 15:50 - 16:10 16:10 - 16:50 Keiichi Kawai (UNSW) "The Optimality of Quota Contracts" (with Pak-Hung Au) 16:50 - 17:30 Fabian Herweg (Bayreuth) "Bait and Ditch: Consumer Naïvité and Salesforce Incentives" 19:00 -Dinner (speakers and guests) at Schneider Bräuhaus

# September 14

9:30 - 10:10	Takuro Yamashita (Toulouse) "Adverse Selection with Cursed Consumers" (with Takeshi Murooka)
10:10 - 10:50	Roland Strausz (HU Berlin) "Collective Reputation" (with Volker Nocke)
10:50 - 11:10	Coffee break <b>■</b>
11:10 - 11:50	Shintaro Miura (Kanagawa) "Prudence in Persuasion"
11:50 - 12:30	Matthias Lang (LMU Munich) "Mechanism Design with Justification"
12:30 - 13:50	Lunch break
13:50 - 14:30	Vincent Meisner (TU Berlin) "School Choice and Loss Aversion" (with Jonas von Wangenheim)
14:30 - 15:10	Takeshi Murooka (Osaka) "Zero Prices: Optimal Pricing of Experience Goods under Consumer Dynamic Loss Aversion"
15:10 - 15:30	Coffee break ■
15:30 - 16:10	Klaus Schmidt (LMU Munich) "Organizational Change and Reference Dependent Preferences"
16:10 -	Closing remarks/Adjourn

### **Abstract**

Speaker Takashi Shimizu

Title How to Really Open the Door: An Economic Analysis on the Risk of Voice

Abstract

It has been widely reported that many employees hesitate in voice or upward communication informing about (potentially) serious problems because they perceive it would bring negative consequences for them. In this paper we consider a dynamic model in which employee's efforts and their consequences are only observable to him and his voice is necessary to regain a good state of organization. We show that it is possible to induce employee's efforts and truthful report by internalizing the value of relationship with the employee. To be more concrete, the optimal wage schedule takes the form of efficiency wage that gives Subordinate a higher value than the outside value. We also show that loyalty serves for voice, while exit option and lump sum transfer do not help.

Speaker Martin Pollrich

**Title** Sweet Lemons: Mitigating Collusion in Organizations

**Abstract** 

This paper shows that the possibility of collusion between an agent and a supervisor imposes no restrictions on the set of implementable social choice functions (SCF) and associated payoff vectors. Any SCF and any payoff profile that are implementable if the supervisor's information was public is also implementable when this information is private and collusion is possible. To implement a given SCF we propose a one-sided mechanism that endogenously creates private information for the supervisor vis-à-vis the agent, and conditions both players' payoffs on this endogenous information. We show that in such a mechanism all collusive side-bargaining fails, similar to the trade failure in Akerlof's (1970) car market and in models of bilateral trade.

Speaker Si Chen

Title Knowing Enough to Think You Are Moral: Information Acquisition and Other-

Regarding Preferences

Abstract

An important question in motivated reasoning is how people acquire noisy information. We conduct a laboratory experiment to investigate this question in the context of self-other tradeoffs. We present causal evidence that the presence of a self-rewarding option in a decision that affects others makes the decision-makers to exploit information in the following way: when the information received so far justifies a self-benefiting decision, decision-makers are more likely to stop acquiring noisy information; when the information received so far does not justify a self-benefiting decision, they are not more likely to stop acquiring noisy information. We propose a theoretical model of Bayesian persuasion that predicts this result. In the model, the sender and the receiver of information signals are the same person (self-persuasion). Surprisingly, we theoretically show that sometimes the welfare of the other party affected can be improved when the decision makers exploit information, which is indeed the case in our experimental data.

Speaker Simeon Schudy

Title A Field Experiment on Leadership and Team Performance in Non-Routine

Analytical Team Tasks

Abstract Leadership has been considered a promising tool to improve team performance in complex tasks, but leaders and leadership styles are chosen endogenously in many team work environments. To uncover the causal effect of such endogenous leadership choices, we conduct a eld experiment with more than 280 teams (1250 individuals) performing a complex nonroutine task. We randomly encourage teams to decide on a leader and find that teams in treatment are significantly more likely to finish the task, and finish the task also more quickly. Leadership appears to influences team organization but does not reduce teams' willingness to "explore" original solutions.

Speaker Akifumi Ishihara

**Title** Formal and Informal Authority in Organizations for Choice and Execution

Abstract

We consider an incomplete contracting model, in which the decision process consists of the project choice and the execution effort, and investigate the optimal allocation of authority of the project choice. Each party has an imperfectly informative private signal on the promising project, and successful execution requires the agent's effort. Contractible allocation of authority may influence not only the probability of the project to be promising, but also the agent's incentive to exert execution effort through his confidence of the promising project choice. Then, it may be optimal to allocate authority to the party who has less precise information on the promising project. We furthermore demonstrate that due to the agent's incentive to conceal his private information to learn the principal's one, delegation may be infeasible informally even when the principal has no incentive to overturn the agent's proposal.

**Speaker** Francesc Dilmé

**Title** Relational Contracts: Public versus Private Savings

**Abstract** We study relational contracting with a risk-averse agent who thus has preferences for smoothing consumption over time. The agent has the ability to save to defer consumption (or to borrow). We compare principal-optimal relational contracts in two settings. The first where the agent's consumption and savings decisions are private, and the second where these decisions are publicly observed. In the first case, the agent smooths his consumption over time, the agent's effort and payments eventually decrease over time, and the balances on his savings account eventually increase. In essence, the relationship eventually deteriorates with time. In the second case, the relational contract can specify the level of consumption by the agent. The optimal contract calls for the agent to consume earlier than he would like, consumption and balances on the account fall over time, and effort and payments to the agent increase. We suggest that modeling informal/relational incentives on consumption/savings decisions is a pertinent alternative to the approach in existing literature on formal contracts in dynamic moral hazard.

Speaker Keiichi Kawai

**Title** The Optimality of Quota Contracts

Abstract

A quota contract is known to be susceptible to the timing games by the agent. We show that this seemingly undesirable feature is what makes the use of quota contracts pro table for the principal who lacks contractual commitment power. A quota contract, by encouraging the agent's gaming activities, endogenously creates information asymmetry between the principal and the agent at the renegotiation stage, thereby curtailing the principal's temptation to renegotiate away any inefficient contractual punishment on the agent. Consequently, a properly designed quota contract enables the principal to save the overall agency cost by partially recovering the ability to implement dynamic incentives effectively.

Speaker Fabian Herweg

Title Bait and Ditch: Consumer Naïvité and Salesforce Incentives

Abstract

We analyze a model of price competition between a transparent retailer and a deceptive one in a market where a fraction of consumers is naïve. The transparent retailer is an independent shop managed by its owner. The deceptive retailer belongs to a chain and is operated by a manager. The two retailers sell an identical base product, but the deceptive one also offers an add-on. Rational consumers never consider buying the add-on while naïve ones can be "talked" into buying it. By offering its store manager a contract that pushes him to never sell the base good without the add-on, the chain can induce an equilibrium in which both retailers obtain more-than-competitive profits. The equilibrium features price dispersion and market segmentation, with the deceptive retailer targeting only naïve consumers whereas the transparent retailer serves only rational ones.

Speaker Takuro Yamashita

Title Adverse Selection with Cursed Consumers

Abstract

As is well known, a market with adverse selection can break down, sometimes completely, with rational consumers who correctly update their belief about the seller's product quality from its price. With "cursed" consumers who fail to correctly update, some trade becomes possible, but its welfare property may be questionable given that some of those consumers necessarily lose, possibly significantly. A natural question is whether an appropriate policy intervention can generate a positive surplus by making some trading possible, but at the same time protecting the cursed consumers from too much losses. This paper answers this question affirmatively under certain conditions. Furthermore, even rational consumers coexisting with cursed consumers can benefit from this, enjoying trade surplus from the seller with higher quality products. As far as we know, this is the first paper that shows that an appropriately controlled market with "behavioral" consumers can help not only them and sellers but also rational consumers.

Speaker Roland Strausz

Title Collective Reputation

Abstract

We study problems of free riding in building a collective reputation. In particular, we analyze the incentives of an organization to engage in "umbrella branding" in an infinitely repeated game of imperfect public monitoring. There are two markets. In each market, the headquarter (active in both markets) and a retailer (active in only that market) jointly produce a good. The quality of the good depends on the (complementary) effort of both players but is only noisily observed by consumers. The two goods can either be sold under different brand names or under the same (umbrella branding). Depending on the share of the effort cost borne by the retailers, umbrella branding may perform worse because of retailers' incentives to take a free ride on each other. However, no matter how small the effort cost borne by the headquarter, as long as it is strictly positive, umbrella branding is strictly optimal for large discount factors; this involves providing the retailers with revenue shares that exceed their effort cost shares.

Speaker Shintaro Miura

Title Prudence in Persuasion

Abstract

This paper considers a class of persuasion games in which the uniqueness of a fully revealing equilibrium (unraveling argument) may fail, and discusses equilibrium selection by prudent rationalizability, which is a version of extensive-form iterated admissibility proposed by Heifetz et al. (2011). First, we characterize prudent rationalizable strategies and show that the pooling of types is prudent rationalizable if and only if the masquerade graph of the types has a cyclic structure. Second, we focus on a perfect Bayesian equilibrium constructed by prudent rationalizable strategies (prudent rationalizable equilibrium) as a reasonable outcome and propose a procedure explicitly constructing it. Finally, we provide a sufficient condition for the uniqueness of prudent rationalizable equilibrium, which is also a necessary condition in some environments.

Speaker Matthias Lang

Title Mechanism Design with Justification

Abstract

Mechanism design has so far focused on cheap talk. With cheap talk, there are clear limits to incentive-compatible communication. In natural language, we often justify our statements to make our claims more convincing. The idea is that the sender provides a number of reasons and the recipient derives the message's meaning from the reasons provided. The recipient learns for one randomly chosen reason whether it supports claims made by the sender. Hence, if the seller uses this reason to support her claim and if the receiver learned that this reason does not support such claims, she becomes aware of a deviation by the sender. To show how powerful justification is, I apply justification to the canonical model of bilateral trade. I prove that justification yields first-best and efficient trade in contrast to previous impossibility results. In addition, I show that justification is flexible and allows for different degrees of partial verifiability— demonstrating that this approach is widely applicable and allows to consider partial verifiability in an elegant way.

Speaker Vincent Meisner

Title School Choice and Loss Aversion

Abstract

There is extensive evidence suggesting that participants in strategy-proof matching mechanisms play dominated strategies. By introducing expectation-based loss aversion into a school choice setting, we are able to explain the costly misrepresentation of preferences by weaker students who prefer popular schools that we observe in the data. For reasonable parameters, the celebrated student-proposing Deferred Acceptance mechanism does not have a truthful choice-acclimating personal equilibrium (CPE). Hence, the mechanism does not deliver in terms of its desirable properties such as stability and (constrained) efficiency. After characterizing CPE in this mechanism, we propose serial dictatorship mechanisms as a strategy-proof, stable alter- native with a truthful CPE. Moreover, we develop report-based loss aversion as a matching-specific concept capturing the idea that students dislike rejections, and we suggest the same class of mechanisms as a remedy.

Speaker Takeshi Murooka

Title Zero Prices: Optimal Pricing of Experience Goods under Consumer Dy-

namic Loss Aversion

Abstract

In many markets, firms adopt specific pricing schemes such as free trials (a zero introductory price and subsequent positive prices) or flat-rate tariffs (a positive introductory price and subsequent zero prices). Why do firms in different market environments adopt such different—but specific—pricing schemes? This paper studies optimal pricing when a firm sells an experience good to consumers who have dynamic reference-dependent preferences à la Kőszegi and Rabin (2009). To effectively attract consumers with loss aversion, even when there is no friction to set negative prices, the firm may endogenously set zero prices in some periods. Depending on the market environment, I derive conditions in which the firm adopts each of the above specific pricing schemes. Further, when a firm tries to attract consumers from a rival firm, the optimal pricing may also exhibit focal prices (setting the same price as the rival's one). Implications of these results to marketing strategy and competition policy are discussed.

Speaker Klaus Schmidt

**Title** Organizational Change and Reference Dependent Preferences

Abstract

This paper shows that loss aversion of workers naturally accounts for a number of puzzling observations on organizational change. It can explain why there is often inertia or very slow change for extended periods of time and a sudden jump of productivity triggered by a crisis. Due to loss aversion change is history dependent, allowing for large productivity differences between firms facing the exact same technologies. The model also shows that if change is probabilistic, it becomes cheaper to implement it the more likely it is to actually happen. Thus, the owner of the firm will induce the manager of his firm to either implement the desired change with a probability close to one, or not to implement it at all. The model also highlights the importance of "expectations management": The owner and the manager of the firm want to push workers to focus on this expectation rather than on the status quo when forming their reference point. This is consistent with the emphasis put by many practitioners and management consultants on the importance of "leadership", "vision" and creating a "sense of urgency" for successful organizational change.

## Information

## Workshop Venue in

#### LMU Munich, Library of Economics and Statistics, "Freskensaal"

Ludwigstraße 28, 80539 München R115 (1st floor)

- Note: "1st floor" in Germany means "2nd floor" in Japan
- Floor map [link]

#### Hotel ==

#### **Schwabinger Wahrheit**

Hohenzollernstraße 5, 80801 München **♀ └**+49 (0)89 383 810

https://www.schwabinger-wahrheit.de/en

#### Dinner **T**

The official workshop dinner will take place at 7 pm on Friday evening.

#### Schneider Bräuhaus

https://www.schneider-brauhaus.de/

#### Direction [1]

Munich Airport to Hotel Schwabinger Wahrheit

- Take the S-Bahn to "Marienplatz". The S-Bahn is indicated with a round green S sign. There are two S-Bahn lines from the airport: S1 (direction "Ostbahnhof") and S8 (direction "Herrsching"), but S8 is about 10 minutes faster. Change at "Marienplatz" and take the U-Bahn (blue square U sign), either U3 (direction "Olympia Einkaufszentrum") or U6 (direction "Garching Forschungszentrum"), and get off at "Giselastraße".
- Alternatively you can take a Lufthansa Express Bus which departs in front of each terminal every 15 minutes. Get off at "Nordfriedhof" and take a U-Bahn (U3/U6, going south) to "Giselastraße".

Hotel Schwabinger Wahrheit to LMU Munich

- About 12 minutes by walking [Google map].
- Take U3/U6 from "Giselastraße" to "Universität" (1 stop).

University/Hotel Schwabinger Wahrheit to Restaurant Schneider Bräuhaus

- About 25 minutes from LMU Munich by walking [Google map].
- About 3 minutes from Marienplatz by walking [Google map].

## **Participants**

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