

# CHAIR OF ORGANIZATION THEORY PROF. Dr. Peter-J. Jost

# ACTIVITY REPORT SEPTEMBER 1ST 2012 – AUGUST 31TH 2013

Professor Dr. Peter-J. Jost
Assistant Professor Dr. Anna-Rohlfing-Bastian
Assistant Professor Dr. Stefanie Schubert
Post-Doc Assistant Dr. Miriam Zschoche
Research Assistant Friedrich Droste
Research Assistant Anna Frese
Research Assistant Steffen Reik
Personal Assistant Karin Senftleben

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#### **TEAM**



Professor Dr. Peter-J. Jost

Peter-J. Jost has been Professor for Organization Theory at WHU since 1995 and from 2001 to 2011 visiting professor at the Free Uni-

versity of Bolzano, Italy. He got his diploma degrees in mathematics and informatics and his doctoral degree in economics at the University of Bonn and his habilitation degree at the University of Basel. Professor Jost's research interests are Managerial Economics, Theory of the Firm, Labor Economics, Industrial Organization, and Law & Economics. He is the author of textbooks on Strategic Conflict Management, Organization and Coordination and Motivation. He is also founder and chairman of the "German Economic Association of Business Administration" (GEABA e.V.). From 2004 to 2005 he has been dean of WHU.



Assistant Professor Dr. Anna Rohlfing-Bastian

Anna Rohlfing-Bastian studied International Business Administration with Language Certificates in English and Italian at

the University of Tübingen and Bocconi University in Milan from 2002 to 2006. After her graduation, she started her dissertation at the Chair for Management Accounting of Prof. Christian Hofmann at the University of Tübingen. In 2007, she followed Prof. Hofmann's invitation to continue her dissertation at his new Chair for Management Accounting at

Mannheim University, where she worked as a research assistant. In 2010, she obtained her Dr. rer. pol. at Mannheim University. In her doctoral thesis entitled "Essays on Incentive Contracts and Organizational Design Franchising", examined she interdependencies between incentive systems and the organizational structure of firms. From January to October 2011, she worked as a research assistant at the Chair for Organization Theory at WHU. During this time, she spent six months as a visiting scholar at Stanford University, Graduate School of Business, California, USA. Since November 2011, Anna Rohlfing-Bastian has been Assistant Professor of Organization Economics and Management at WHU. In her research, she integrates Management Accounting and Organization Theory with a special focus on incentive systems, management compensation, and the assignment of tasks in firms.

In summer 2013, Anna Rohlfing-Bastian accepted an offer to become a W3-Professor of the Chair for Managerial Accounting at the University of Tübingen.



Assistant Professor Dr. Stefanie Schubert

Stefanie Schubert has been Assistant Professor for Organization Theory and Management since September 2009. Her research focuses on industrial eco-

nomics, particularly the use of game theoretic models to analyze the strategic behavior of firms. She studied Economics at the University of Heidelberg. From 2003 to 2008, she has been a research and teaching assistant at the University of Duisburg-Essen and visiting

researcher at the research department "Labour Markets, Human Resources and Social Policy" of the Centre of European Economic Research (ZEW) at Mannheim. Stefanie Schubert completed her PhD in 2009 with a thesis titled "Analysis of the German Social Security System Using Applied General Equilibrium Models". From May 2008 to July 2009, she has been a research assistant at the Chair of Organization Theory at WHU. She published in international journals such as the Journal of Health Economics and Economic Modelling.



Research Assistant Dr. Miriam Zschoche

Miriam Zschoche has been post-doctoral researcher at the chair since May 1st, 2011. She studied Economics at the Universities of Leipzig, Potsdam, and

Sydney before she worked for Fraunhofer headquarters in Munich. From 2007 to 2010 she was a research assistant and Ph.D. student at the Chair of Innovation and International Management, University of Augsburg. Since February 2013 she has been receiving a research scholarship from Fritz Thyssen Foundation. From March to August 2013 she visited Kellogg School of Management (Northwestern University). Her research interests are Strategic and International Management.



Research Assistant Friedrich Droste

Friedrich Droste joined the Chair of Organization Theory in December 2009 as a research assistant. He holds a diploma degree in economics from

Rheinische Friedrich-Wilhelms-University of Bonn with majors in Game Theory, Management and Applied Microeconomics and Neuroeconomics. During his studies he spent a semester abroad with an Erasmus scholarship at the Aalto University School of Economics in Helsinki, Finland, with courses in Financial Economics. In 2012 Friedrich was a visiting scholar at the Lancaster University School of Management, U.K., supported by a Graduate Scholarship of the Konrad-Adenauer-Foundation. In his dissertation he investigates how firms can strategically manipulate electronic word-of-mouth in order to impact consumer decision-making process. Since 2011 he has received a research grant from Konrad-Adenauer Foundation.



Research Assistant Anna Frese

Anna Frese has joined the team as a research assistant at the Chair of Organization Theory since June 2012. She studied Business Administration at

WHU (B.Sc. and M.Sc.) and finished her studies in 2012. During that time, she spent two semesters abroad, namely at Stockholm School of Economics and Instituto Tecnológico Autónomo de México in Mexico City. Her majors were Strategy & Organization as well as Economics. She wrote her Bachelor Thesis on "Corporate Social Responsibility as Competitive Advantage" and her Master Thesis on "Optimal Group Size and the Role of Social Preferences". Currently, she is working on her dissertation project about price discrimination and quality uncertainty.



#### Research Assistant Steffen Reik

Steffen Reik has been a member of the chair since October 2009. Before, he completed his studies in Business Administration at the University of

Mannheim with the degree of "Diplom-Kaufmann" and was co-founder of an internet startup. As exchange student, he took part in the 2<sup>nd</sup> year MBA-program of the Asian Institute of Management in Manila, Philippines from 2006 to 2007. In summer 2013, Steffen was staying at the Department of Economics of the University of California at Berkeley, USA as Visiting Researcher, invited by Prof. Benjamin Hermalin. Steffen's Ph.D. thesis concerns topics of Credence Goods and Information asymmetry. Since 2012 he has been funded by a merit scholarship of the "Friedrich-Ebert-Stiftung".



#### Personal Assistant Karin Senftleben

Karin Senftleben joined WHU in 1988 after having finished her language studies. Until 1995 she was secretary of Prof. Dr. Adolf-Friedrich Jacob at the

chair of Finance. Since then she has been supporting Prof. Dr. Peter-J. Jost as his personal assistant at the chair of Organization Theory.



#### **TEACHING**

#### FALL TERM 2012 BACHELOR OF SCIENCE

#### Organization und Coordination

We define economic organizations as entities in which several people interact with each other to achieve individual or collective economic goals. According to this definition not only firms are considered as organizations, but also markets, interorganizational cooperations and other collective entities. This, however, is decisive for our understanding of firms: The sharpened competition makes it increasingly important for the designer of a firm to understand the architecture of other firms. An active design of a firm's environment requires the knowledge of interfirm arrangements as well as the understanding of the economic policy or the functioning of markets. An overall perspective of the organization is necessary.

The course was structured as follows:

- 1. The organization problem and the relevance of coordination
  - 2. Coordination of economic activities
  - 3. Hierarchical coordination

In the first part of the course the fundamental problem of organization were discussed. Short cases were used to introduce solutions for the coordination of economic activities. The second topic is concerned with the problem whether to coordinate economic activities within markets. Here the interorganizational cooperation as a mechanism for coordination was introduced. The third part of the course was concerned with hierarchy as an instrument of coordination. Using the value creation of a firm the benefits and costs of different organizational design variables as

well as the divers forms of in-company structures were discussed.

### Literature Seminar Managerial Decision Making

Within the seminar "Managerial Decision Making" students participated in classroom experiments which are specifically designed to simulate economic decision situations. Students actively interacted and actually experienced the situation. In this way they got a deeper insight into fundamental economic concepts and a better understanding of how human cognition affects economic behavior.

After analyzing the scope and the role of experiments in economics, the course explored some basic principles of experimental design and the relationship between the economic laboratory and real market institutions. We then focused on the consideration of a number of areas in which experiments have been applied.

#### MASTER OF SCIENCE

#### Theoretical Foundations of Decision-Making

Interdependent decision-making is an integral part in everyone's life: As soon as you interact with another person in order to achieve a certain goal, the result of your action does not solely depend on your own behavior but also on the other party's behavior. These interdependencies are prevalent in every organization, in families, in companies, in sport clubs etc. The fact that members of such organizations in general have different individual objectives, however, may lead to strategic behavior as well as to serious conflicts if people try to realize their contradicting goals.

The purpose of the course is twofold: First, students are trained to recognize and formalize situations of interdependent decision-making. The second objective is to analyze and discuss those situations by using game-theoretic concepts.

The course offers an introduction into game theory. We discussed situations with simultaneous and sequential decision making, with complete and incomplete information. During the course some basic problem sets that deepen and enlarge the covered material were discussed.

#### SPRING TERM 2013 BACHELOR OF SCIENCE

#### Seminar Theories of the Firm

A long-standing issue in economic theory concerns the determinants of the boundaries of firms. Why does it matter if a particular transaction is carried out inside a firm or through the market or via a long-term contract? From the neoclassical perspective the role of the firm cannot be determined.

In this seminar, students got to know, compared, and discussed different economic approaches to answer this question. Students presented the results of their seminar papers on selected subjects of the theories of the firm.

#### MASTER OF SCIENCE

#### Advanced Organization

The seminar used the concepts introduced in the course "Theoretical Foundations of Decision Making". Its objective was to practice and deepen the theoretical knowledge by discussing present-day organizational problems in a sound economic way, for example

- Apply game theory to the analysis of firms' organization and strategy

- Address issues in competitive strategy, organizational structure, task assignments and incentive systems

In the first meeting an overview of possible topics in the field of organization and management was given. The selected papers were then presented by the students and afterwards discussed within the group. Learning goal was to understand

- Competitive strategy and market organization
- Strategic management and its relationship to organizational structure
- Organizational design under moral hazard problems
- Incentive problems and their impact on the organization

#### PHD PROGRAM

#### Selected Topics on Organization Theory

Objective of the course was to introduce postgraduate and advanced students into a selected problem of organizational theory and to give an overview of existing literature in this research field. This year's subject was "Online advertizing – Targeting, auctions, and privacy".

#### BACHELOR THESIS

Lukas Bohl: Strategic Analysis of Targeted Marketing

#### MASTER THESES

Thibaud Liard: Impact of Competition on Innovation in the Manufacturing Sector.

Ulli Jendrik Koop: Delegation of Decision Authority and External Incentives.

#### **MBA THESIS**

Wolf-Hagen v. Angern: The Pirates of Somalia - A Game-Theoretical Approach to a General Understanding of the Roots and Logic of Modern Piracy

#### RESEARCH

#### DISSERTATION PROJECTS

Camilla Boschetti: Strategic Interactions within Multinational Companies: A gametheoretical Analysis

Thanks to the globalization process, which has invested the world economy in the last 40 years, firms have begun to evolve in order to respond to changed environmental conditions. The multinational company is nowadays a common organizational form. All the companies listed in the German stock exchange DAX 30 are multinational companies: they have their headquarters in the home country and several subsidiaries all over the world. Usually the strategic, administrative and personnel department are located in the home country whereas production as well as research & development are in the foreign market in order to respond quickly to market needs. The crucial feature of the multinational company is the ability to transfer knowledge from the unit owning it to those units, which can make best use of it. Moreover, some units have begun to distinguish themselves from other units due to the production, deployment and transfer of knowledge of use for the entire multinational company, the so called centers of excellence.

Aim of the work is that of shedding light on the structural and information interactions, which take place within the multinational company, within a theoretical model. For simplicity, the multinational company object of analysis has two subsidiaries. The headquarters, located in the home country and pursuing strategic as well as administrative tasks, has two subsidiaries in two different foreign markets.

Given the described organizational structure, the main research question leading the work may be subsumed as follows: should the headquarters involve the subsidiaries in the knowledge development processes or should R&D be carried out centrally? These questions try to subsume two streams of literature, that is to say, the management literature as well as the economic literature. The role played by head-quarter and subsidiaries within the R&D activities will be investigated, taken into consideration both the external competitors in the two markets of reference as well as the company-internal information flows.

Camilla Boschetti is Italian citizen. She studied Politics, Philosophy and Economics (PPE) as well as Economics and Management at the Free University of Bolzano (Italy) and received her Master of Science in Management from the University of Lugano (Switzerland). Since 2011 she has been an external PhD-student at the Chair of Organization Theory at WHU. Currently she is employed at Allianz Deutschland AG in Munich as a team leader in operations, commercial business fleet department.

Sebastian Burchhardt: Identity driven Contests with Endogenous Entry – A Principal-Agent-Model on employee's positioning within Corporations and its impact on the success of Corporate Mergers and Acquisitions

Since the middle of the 20<sup>th</sup> century companies have responded increasingly to the challenges of a globalizing economy by organizational changes. One of various options is either to merge with other companies or to acquire (respectively divest) organizational sections in order to integrate them into another organizational context. Even though researchers agree generally on the advantages and involved targets of corporate mergers and acquisitions (M&A), practical experiences reveals unfortunately high rates of failure.

Up to the end of the past century M&A oriented research literature mainly focused on aspects of successful partner selection and evaluation. Since then however organizational research is increasingly and selectively looking into the reasons for the observed high rates of M&A failures. One of the mentioned reasons is that the psychological impact of M&A activities on the involved employees and their motivation is already underestimated in the early stages of the change process. The M&A literature therefore developed the "merger syndrome" as a catch-all phrase for psychological symptoms employees might face during the preparation and realization of M&A activities. Possible consequences are frustration, hassle and depression, followed by internal dismissal and turnover of talented employees, resulting at the end in a loss of productivity and profitability.

The intention of the dissertation project is to develop a game-theoretic model that analyzes possible behavioral patterns of employees during M&A-processes and the respective impact on the success of the transaction itself. Since the actual research on M&A failure rates focuses strongly on the "Social Identity Theory", the approach of the model is manly driven by the combination of classic contest with identity models. The result is the development of a principal-agent-model that allows for endogenous contest entry driven by identity. Since so far there is no economic model that describes the participation decision of a possible contestant as something that is "identity driven", the dissertation project contributes to close the respective research gap. In addition the model allows deriving guidance for the practical M&A management.

Sebastian Burchhardt studied Business Economics and Management at the Ludwigs Maximilians University in Munich. Since 2009 he has been an external PhD-student at the Chair of Organization Theory at WHU. Currently he is financial controller of the Export Sales Department at Siemens Audiolo-

gische Technik GmbH (Sector Healthcare) in Erlangen.

Friedrich Droste: Krieg der Sterne: Die strategische Manipulation der elektronischen Mundpropaganda – eine spieltheoretische Analyse

The strategic determination of prices and the use of advertising are the traditional ways for firms to signal quality and by this means to persuade consumers of their products. While consumers are facing ex-ante uncertainty about the true product quality of experience goods due to the asymmetric distribution of information firms can reduce the arising insecurity by establishing an adequate reputation through the provision of high quality products.

The Internet and especially advancements in communication technologies have created additional ways for consumers to get information about product characteristics. From a consumers perspective electronic word-of-mouth in the form of Third-party intermediaries, public forums, social media, and product reviews facilitate the acquisition of relevant information and account for a higher market transparency with regard to product qualities in certain markets. Due to the perpetually availability of information firms are able to infer consumer preferences by observing the information exchange in these channels. However due to the bilateral exchange of product experiences firms are no longer able to completely control the expectation formation process of consumers. The anonymity of the Internet allows all market participants to heavily engage in word-of-mouth communication at no charge. Hence firms aim at achieving competitive advantages by infiltrating the electronic word-ofmouth with fake reviews and false product information thereby influencing consumers' ex-post information and the decision-making process of following consumer groups.

So far, good-mouthing about own product information or distributing faked negative

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eWOM about the competitor's product have been identified as equilibrium strategies. In a two-period model with Electronic word-ofmouth the dissertation identifies inverse goodmouthing, i.e., good-mouthing the competitor's product rating, as a profitable strategy. The dissertation strongly draws on research in information economics, the advertising literature, theory. reputation Multiple theoretical analyses investigate and analyze innovative manipulation strategies in order to deepen the insights of how electronic word-ofmouth influences the behavior of consumers and firms and hence changes competitive market structures. The results augment the firms' strategic options and shed new light on the use of hidden word-of-mouth dynamics.

At first sight, this strategy seems quite counter-intuitive, because good-mouthing the competitor's product induces an enhancement in demand for the manipulated firm in the upcoming period and, by analogy, a reduction of demand for the manipulating firm's own product. Thus, the implementation of this strategy includes some form of demarketing as manipulating the competitor's product rating upwards leads to a lower perceived value of the firm's own product from a consumer perspective. With inverse good-mouthing, the firm with the originally superior product moves the competitor's rating above its own product rating. Thus, the manipulating firm generates a high share of opinion leaders (i.e., consumers in the first period) who are dissatisfied with the inferior product.

Consequently, inverse good-mouthing evokes highly negative eWOM for the inferior product which leads to a large loss of demand in following periods, i.e., in the follower market. At the same time, all opinion leaders are satisfied with the superior product which leads to positive eWOM about this firm and a demand enhancement in the follower market in subsequent periods. From a practical point of view, inverse good-mouthing is very subtle and hard to identify for consumers and the manipulated firm. Consumers might well antic-

ipate that firms have incentives to strategically manipulate their own product ratings upwards; however, the strategy of inverse goodmouthing is almost impossible to anticipate and detect. Firms evaluate positive eWOM or an increase in their product rating as a sign for a good match of product characteristics and actual consumer preferences without suspecting that fake reviews posted by their competitor might be the underlying drivers of the product rating. Besides the indirect creation of negative eWOM about the competitor's product and the associated long-term reputation damage, inverse good-mouthing can induce false inferences about changes in consumer preferences.

Friedrich Droste has been a research assistant at the Chair of Organization since December 2009. For more information see page 6 of the report.

Anna Frese: A Strategic Analysis of Price Discrimination in the Presence of Quality Uncertainty

This research project is concerned with the latest development of couponing. As a firm offers price discounts to some of its customers, it might on the one hand create additional demand in the short and in the long term through repeat purchases. However, negative side effects of this popular business practice include the perceived unfairness of regular customers who feel that they pay a higher price for the same product or the disappointment of coupon users who get a worse product than normal consumers do. The social implications of price discrimination in the presence of quality uncertainty have not yet been sufficiently incorporated in the literature. The research project aims at closing this gap by providing a new game theoretical model accounting for social preferences and the role of quality uncertainty in a market with price discrimination. Anna Frese has been a research assistant at the Chair of Organization since June 2012. For more information see page 6 of the report.

Steffen Reik: Spieltheoretische Analyse der strategischen Interaktion zwischen Akteuren eines Vertrauensgütermarktes

The dissertation project focuses on credence goods and their information asymmetry between sellers and buyers. Credence goods markets, such as markets for health care services or car repairs, are characterized by the ex ante and ex post information asymmetry regarding the quality of the sold good. These markets are thus potential subject to fraud either by overtreating, undertreating or overpricing customers. The FBI, for example, estimates that up to 10% of the US health care spending of about 3 trillion USD are due to existing fraud in the market.

There exist several studies about credence goods, yet none of them has focused on a heterogeneous customer base regarding different states of information towards the credence good. Some empirical studies however show that informed customers in markets for credence goods do exist, such as doctors and their family members or close friends seeking health care. Steffen incorporates these informed customers into a game-theoretic model about credence goods to analyze the influence of additional information in a credence good market on equilibria and overall social welfare. First findings suggest that in a monopolistic market, an increased share of informed customers can lead to less welfare and turn a formerly efficient market inefficient. Steffen finds the liability of sellers to be a crucial assumption towards the influence of information.

Wolfgang Weichenrieder: "Der Trade-Off zwischen Lokalisierung und globaler Effizienz"

For the majority of the globally known brands and the corresponding companies international trade today is not only a implicitness, but nothing less than an indispensable must in the quest for sustained success and competitiveness. Regardless of the industry, the possible benefits of international trade are manifold, e.g. increase in sales volume and turnover or hedging against exchange rate risks, to name just a few.

A basic question when thinking about international trade is the consideration between integration on the one and localization on the other hand. Condensed to the essence stands the question: "Should we harvest the potentials by increasing production capacity in the existing plants in our home country or by setting up production abroad?"

The aim of the doctoral thesis is to analyze the influence of a range of determining factors in the decision making processes of internationally acting companies on the question internalization vs. localization. A model is developed, that depicts interdependencies between various factors and generates forecasts on the decisions companies take under given premises in competitive games. A special focus is put on the analysis of the effects of a "buy local" customer preference.

Wolfgang Weichenrieder studied Business Administration and Business Economics at the University of Regensburg. Since 2007 he has been an external PhD-student at the Chair of Organization Theory at WHU. Currently he is logistics project manager at the AUDI AG.

Ralf Widtmann: Intermediation vs. Disintermediation – A borrower's perspective

Peer-to-Peer platforms are the major innovation in the banking industry by enabling individuals to lend to one other without a bank as an intermediary. The internet supports the oldest form of money lending by making personal lending possible without the former requirements of geographic or social proximity. In 2012 most countries had a couple of competing platforms. The two US flagship platforms Lending Club and Prosper passed the important psychological barrier of one billion dollars lent in April 2012.

Ralf Widtmann studies a location game of a personal lending platform after its entrance into an oligopolistic banking market. The consumers (the borrowers) are located around the perimeter of a Salop circle and can either borrow from the platform competing with all banks or from one of the banks. Two horizontal differentiation criteria are used to capture the different parameters in the local and the global competition. Transportation costs capture the switching costs in the initial local competition between the banks. Another location dependent parameter is introduced to capture the borrowers' preferences regarding the interaction with a bank or with a platform. The platform's location decision reflects the degree of intermediation (number of functionalities) it offers. The distance to the banks is a taste criterion from the borrower's perspective, but influences the platform's production costs.

Ralf Widtmann shows that the optimal strategy for the platform is driven by the relationship between the parameters production cost advantage and the intensity of the preferences. Maximal differentiation is the optimal strategy when the production cost advantage exceeds the transportation costs (intensity of preferences). He extended the models build on Salop circles with centres by introducing a second spatial differentiation criterion and linking the location (design) decision to the production costs function.

Ralf Widtmann studied Economics and Business Administration at the Vienna University of Economics and Business (1998-2004). He was microfinance consultant for FWWB in India, board assistant for Allianz and finally manager for the financial services team of Roland Berger Strategy Consultants. In 2012 he founded his own strategy consultancy.

#### DISSERTATION

Fabian Frank: The Optimal Design of Multitasking Tournaments

The doctoral thesis derives a principal's optimal promotion design if one agent is better at one and another at a second task. The models of the thesis combine the contest and tournament literature (of which a job promotion is one application) with the multitasking literature. There is a research gap since the papers related most closely to the models in the doctoral thesis do not derive the optimal number of prizes, i.e., the principal's optimal promotion design, for multiple tasks. Furthermore, the literature on multitasking contests and tournaments does not take asymmetry between agents into account.

The models in this doctoral thesis show a trade-o¤ between one and two tournaments in a setting with two tasks and two agents. The first, basic model derives the optimal tournament design under the assumption of symmetric agents. In practice, however, principals are almost always faced with asymmetric agents. The second model is therefore an extension to asymmetric agents. The principal implements the optimal promotion tournament based on a trade-off between one and two tournaments which depends on the cost parameter defining the asymmetry between agents and the form of the probability function. Finally, specifc applications provide insights into contexts where the multitask tournament set-up proposed in the first two models is not applicable. On the one hand, investment into skills with an exogenous optimum such as self-confidence leads to mixed- rather than pure-strategy equilibria. On the other hand, if one of the tasks is difficult to observe, the principal might engage in a revelation activity to improve her observation.

#### RESEARCH PROJECTS

Peter-J. Jost: "Der Ball ist rund, ein Spiel dauert 90 Minuten, alles andere ist reine Theorie"

In a game-theoretic framework we model a soccer match between two teams as a twostage contest with two activities where each team can choose its tactics in attacking and defending for each half of the match. Both activities are costly. Moreover, we allow teams to be heterogenous with respect to the abilities of their forwards and defenders. Teams' activities together with their abilities then determine the winner of the match. We completely analyse the optimal incentives of teams to exert effort as well as the optimal allocation of these efforts between offense and defense. In particular, we compare the strategic behavior of teams under the two- and three-point victory rule. Most of our results differ from those in the previous literature on soccer. For example, the common belief that a losing team at halftime will adopt offensive tactics whereas the leading team will adopt defensive ones cannot be supported in our model. Instead, we show that the leading team may preempt its competitor in the sense that the other team gives up with positive probability in the second half.

Peter-J- Jost, Stefanie Schubert and Miriam Zschoche: Incumbent Positioning as Determinant for Strategic Response to Entry: Evidence from the High-Quality Restaurant Market (under review for Small Business Economics)

Extant research has identified diverse firm characteristics that determine an incumbent's reaction towards market entrants. This study widens the perspective from a firm's absolute attributes to its relative positioning within its competitive environment. In doing so, the study integrates theoretical and empirical methods. First, we derive hypotheses from a game-

theoretic analysis. On a vertical dimension, we predict a stronger quality and price reduction of firms positioned at the higher end of quality and price before entry, than at the lower end. On a horizontal dimension, we interpret firms' product varieties as attributes and argue for a nonmonotonic relationship between a firm's positioning and its reaction towards entry. As a second step, an empirical analysis using a novel dataset of the high-quality restaurant market in Germany verifies the theoretical assumptions.

Peter-J- Jost and Miriam Zschoche: Efficient Organization of Dynamic Capabilities: Exploiting Complementarities by Organizational Bundling

A firm's ability to change is decisive for sustaining its competitive advantage in a volatile business environment. This study complements extant research that emphasizes the importance of human resources as a key determinant of a firm's "dynamic capability" by applying an organizational viewpoint. Building theoretically on the interplay of strategy and structure, we argue for the following relationships between structure, strategy, and performance: First, the better the fit of strategic, coordinative, and motivational capabilities, the more successful are firms' change projects. Second, this fit of change capabilities will be higher when they are bundled in one organizational unit. Third, the establishment of an organizational unit that concentrates change capabilities is determined by the type of change projects and the dynamic of the business environment. A management survey involving German firms supports our hypotheses.

Peter-J. Jost and Stefanie Schubert: The Effects of the Three-Point Victory Rule on a Soccer Team's Strategic Behaviour

This paper analyses the impact of the three-point victory rule on contest incentives in

soccer, which had the objective of more attractive competitions by a larger number of goals. A game-theoretic analysis is presented, where soccer is modeled as a two-stage contest between two heterogeneous teams. Teams choose their optimal number of attacking and defending players in both halves of the game, which determines the probability of scoring a goal and the outcome of the match. Using data from different seasons of the German Premier League (1. Bundesliga), we find that the more defending and the less attacking players, the higher the probability of winning a match. Our data does not support the three-point victory rule with respect to an increase in the number of goals.

#### Peter-J. Jost (joint with Achim I. Czerny): Tournaments and Multitasking

We consider a tournament model in which the agents perform two tasks on behalf of the principal. To incentivize the agents, the principal can choose between two rank-order tournament structures: (i) a single tournament for both tasks or (ii) two simultaneous tournaments, one for each task. We demonstrate that the principal's optimal tournament design depends on three factors: The distributions of random shocks which crucially determine whether the agents' effort choices in a single tournament can be replicated with a higher or lower budget for winner prizes in a multiple tournament; the heteroscedasticity of the random shocks which governs the agents' incentives to take effort for a particular task; and the agents' task-specific productivities which influence the principal's preferred allocation of total efforts between the tasks. Several extensions are considered to analyze the robustness of these findings, including asymmetries in tasks and agents, interdependent tasks and the presence of more than two tasks.

Anna Rohlfing-Bastian (joint with Stefan Reichelstein): Levelized Product Cost: Concept and Decision Relevance

The paper examines a life-cycle cost concept that applies to both manufacturing and service industries in which upfront capacity investments are essential. Borrowing from the energy literature, we refer to this cost measure as the levelized product cost (LC). Per unit of output, the levelized cost aggregates a share of the initial capacity expenditures with periodic fixed and variable operating costs. The resulting cost figure exceeds the full cost of a product, as commonly calculated in managerial accounting. Our analysis shows that the LC can be interpreted as the long-run marginal product cost. In particular, this cost measure is shown to be the relevant unit cost that firms should impute for investments in productive capacity.

Anna Rohlfing-Bastian (joint with Steffen Reichmann): Decentralized Task Assignment and Centralized Contracting: On the Optimal Allocation of Authority

In May 2013, the paper has been submitted to the Journal of Management Accounting Research. After the first revision, the paper has been conditionally accepted for publication in July 2013. The final adjustments have been made and the paper has been resubmitted to the editor in expectance of the final acceptance.

To provide efficient incentives, the three components of an incentive system (i.e., performance measurement, rewards, and the allocation of decision rights) need to be balanced against each other. In practice, the authority to decide on these components is frequently distributed across hierarchical levels, thus requiring to adjust centralized decisions with regard to decentralized authority. This paper investigates the centralized design of incentive contracts when decision authority with respect to the allocation of tasks is delegated to lower hierarchical levels. It provides an analysis of

the optimal allocation of authority (i.e., "who should be the boss") and considers the interdependencies between organizational design choices and the design of optimal incentives.

Anna-Rohlfing-Bastian and Peter-J. Jost: Benefits of Delegating Decision Authority: An Incentive Contracting Perspective

The paper has been submitted to a leading Accounting Journal (Jourqual A, Handelsblatt 0.7) and received a "revise & resubmit" in summer 2013. It is currently revised and expected to be sent back by the end of 2013.

The paper analyzes the benefits of delegating decision authority to lower hierarchical levels in an environment with moral hazard and limited liability. A principal as firm-owner is confronted with a series of projects which require the productive input of two agents. As projects differ with respect to their task-related issues, the coordination of the agents' activities is essential. We answer the question of whether the principal should be in charge of coordination (centralization) or one of the agents (decentralization)? We explain the existence of both organizational structures on the basis of pure incentive consideration and show that decentralization can be optimal for the principal. As an extension, we explain under which circumstances it is beneficial for the principal to also delegate the incentive contracting authority to the coordinating agent (contract decentralization).

Friedrich Droste, Peter-J. Jost and Anna Rohlfing-Bastian: Star Wars – Strategic Use of Hidden Word-of-Mouth Dynamics (under review for Marketing Science)

The development and dispersion of the Internet has enabled consumers to bilaterally exchange product consumption experiences. The resulting electronic word-of-mouth (eWOM) information is perceived to be unbiased, authentic, and not in the interest of the

producing firms (Dellarocas 2003). As a consequence, eWOM communication has become the most in influential information source for consumers when it comes to making purchasing decisions (e.g., Godes et al. 2005, Godes and Mayzlin 2004). Doh and Hwang (2009) showed in an experimental setting that roughly 98 percent of online customers referred to eWOM information (online customer reviews. forums, and chats) prior to making a purchasing decision. Accordingly, firms have an incentive to either incorporate eWOM directly into their marketing strategies (e.g., Shaffer and Zettelmeyer 2002, Chen and Xie 2005, 2008, Chen, Liu, and Zhang 2012) or to manage the product rating and consumer belief dynamics by posting fake reviews (Hu et al. 2011, Hu and Koh 2012). The latter is particularly possible as the anonymity of the Internet does not allow consumers to differentiate between true and manipulated reviews (Friedman and Resnick 2001).

#### **PUBLICATIONS**

- Jost, P.-J., 2013: An Economic Theory of Leadership Styles, Review of Managerial Science, 7 (4), pp. 365-391.
- Jost, P.-J., Bieberstein, F. von, 2013. Strategische Anreizgestaltung. In: Handbuch strategisches Personalmanagement, 151-170, 2. ed. Wiesbaden: Springer Gabler

#### REFEREE ACTIVITIES

- Referee and Scientific Advisor for the Regular Program of the German-Israeli Foundation (GIF).
- Comparative assessment for the "Wissenschaftspreis der Kurt und Felicitas Viermetz Stiftung 2013" at the University of Augsburg.
- Review of submissions to the XIV. Symposium zur ökonomischen Analyse der Unternehmung 2013.

- Assessments for the admission of WHU students to the Studienstiftung des Deutschen Volkes.
- Journals
  - Long Range Planning
  - Journal of World Business
  - International Journal of Human Resource Management
  - Managerial and Decision Economics
  - European Accounting Review
  - Zeitschrift für Betriebswirtschaft
  - Business Research
  - European Accounting Review

#### **PRESENTATIONS**

- Miriam Zschoche: Efficient Organization of Dynamic Capabilities: Exploiting Complementarities by Organizational Bundling, presented at GEABA Annual Conference, 21.09.2012, Graz.
- Miriam Zschoche: Performance Effects of Divesting Foreign Production Affiliates: A Network Perspective, presented at Strategic Management Society Annual Conference, 08.10.2012, Prague.
- Anna Rohlfing-Bastian: Decentralized Task Assignment and Centralized Contracting: On the Optimal Allocation of Authority, RWTH Aachen, 16.01.2013.
- Peter-J. Jost: Multi-stage Contests with Heterogeneous Agents and Multi-Tasking: The Case of soccer Annual Meeting of the Ausschusses für Unternehmenstheorie und -politik im Verein für Socialpolitik, 26.-27.04. 2013, Bendorf.
- Anna Rohlfing-Bastian: Decentralized Task Assignment and Centralized Contracting: On the Optimal Allocation of Authority, 36th Annual Meeting of the European Accounting Association, 06.-08.05.2013, Paris.

- Anna Rohlfing-Bastian: Levelized Product
   Cost Concept and Decision Relevance,
   University of Tübingen, 28.05.2013.
- Peter-J. Jost: The ball is round, the game lasts 90 minutes, everything else is pure theory, 2nd Koblenz Science Slam, 18.01 2013, WHU Research Seminar of the Economic Group, 29.04.2013, and Department of Economics at Augsburg University, 13.05.2013.
- Anna Rohlfing-Bastian: Discussion of Effective Central Control over Transfer Pricing Negotiations by Clemens Löffler and Thomas Pfeiffer, Accounting Research Workshop, 05.-07.06.2013, Basel.
- Miriam Zschoche: The Effects of Competition among Service Firms from the Same Country-Of-Origin Abroad, Academy of Management Annual Meeting, 12.08.2013, Orlando.

## XIII. SYMPOSIUM ZUR ÖKONOMISCHEN ANALYSE DER UNTERNEHMUNG

# ANNUAL CONFERENCE OF THE GERMAN ECONOMIC ASSOCIATION OFBUSINESS ADMINISTRATION

#### SEPTEMBER 19.-21.2012, UNIVERSITY OF GRAZ

As chairman of the German Economic Association of Business Administration, GEABA, e.V., Peter-J. Jost organized the 2012 annual conference. The location this time was the University of Magdeburg.

The topic "Accounting, Governance, and Economics" was first highlighted from different perspectives in an open session by three guest speakers:

- Benjamin Hermalin University of California, Berkeley: "Corporate Governance: A Critical Assessment"

- Stefan Reichelstein
   Stanford Graduate School of Business:
   "Economic Analysis of Accounting Information"
- Shyam Sunder
   Yale University:
   "Norms and Regulations: Financial
   Reporting by Evolution or Design"

In the following two days 33 researchers presented their papers. The best young researcher finally received the "Walther-Rathenau Award" and a cheque of 500 Euro donated by GEABA.

