

## Insights from the Experimental Finance 2016

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The 7th Experimental Finance Conference was jointly organized by the University of Mannheim and the Society for Experimental Finance (SEF) and took place from 8–10 June, 2016.<sup>2</sup> The conference also serves as the annual meeting of the SEF. The conference venue was the village of St. Martin in the Palatinate, as the Experimental Finance is traditionally held in a remote location to foster the exchange and discussion between participants. With close to 100 participants and 60 presentations, the conference has become one of the main events to discuss experimental research in finance. With participants from 21 countries the conference attracted a very international field of researchers.

The first of two keynote speeches is delivered by *Armin Falk* (University of Bonn), who presents the Global Preference Survey, a survey collecting representative data on risk and time preferences, positive and negative reciprocity, and altruism. This preference data, which he jointly analyzes with *Anke Becker*, *Thomas Dohmen*, *Benjamin Enke*, *David Huffman*, and *Uwe Sunde*, comes from 76 countries and 80,000 individuals. In a prior study, the authors have experimentally validated the preference measures they now take to the field. This proves to be especially important for the audience, as for finance experiments a standardized preference module could be extremely helpful. The now obtained global data can be analyzed on an individual level or in the cross section of countries. In a first step, Falk presents world maps of preferences and talks about their interdependencies. These preferences prove to be predictive for individual behavior including savings and risky choice. Unsurprisingly, patience is a major factor for the accumulation decision, while risk preferences explain risky behavior in the employment and health domain, both within and between

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<sup>2</sup> Local organizers were Alexandra Niessen-Ruenzi and Christoph Merkle (both University of Mannheim), who were supported by SEF conference officer Michael Kirchler (University of Innsbruck). The organizers thank the German Research Foundation, the University of Mannheim, and the Mannheim Business School and Area Finance for their generous financial support. We are also grateful to Marion Baierlein, Constantin Lang, Karl Schulz, and Yang Zou for their assistance with organizing the conference. We further thank all reviewers, in particular Stefan Zeisberger.

countries. The country data shed further light on cultural differences and provide some evidence about the origin of these differences. The authors support the view that cultural variation might coevolve with preferences.

The main part of the conference is then organized in parallel sessions (two at a time) and plenary sessions.<sup>3</sup> Papers for the plenary sessions have been selected not only based on quality but also for their relevance to a broader audience. Each presentation is assigned a discussant. In the contributed paper sessions, two main topics emerge: individual investor behavior and experimental asset markets. This becomes evident already in the first parallel session in which a session on “Expectations in Asset Markets” competes with a session on “Investment Decisions”. In the first asset market session, extensions to the design of Smith, Suchanek and Williams are suggested that allow gaining insights about the beliefs of participants. *Wael Bousselmi* introduces shocks to fundamental value, *Thomas Stöckl* overlapping generations of investors, and *Brian Kluger* a call option that trades simultaneously with the underlying asset. *Sandra Andrzejewicz* studies an altogether different asset market in real time where students trade assets betting on the slide number their professor will finish a future lecture.

A common theme both for individual decision making and the asset market research are non-standard preferences. *Alexandar Giga* finds an individual level that investors are skewness seeking even for negative expected value assets and shows that learning is limited. *Wiebke Szymczak* identifies an endowment effect in experimental asset markets. Interestingly, one of the oldest examples for expected utility violations – ambiguity aversion – drew new attention with contributions by *Konstantinos Georgalos*, *King King Li*, and *Christian König-Kersting*. These are instances, in which the close relationship of experimental finance to decision theory and behavioral decision research becomes apparent, which is less strong for other sub-fields of finance.

But even for risk, in finance usually associated with volatility or beta, things are less than clear. *Stefan Zeisberger* (Stony Brook University) bluntly asks with the title of his plenary presentation “What is risk?” and goes on to show that individual risk perceptions for financial assets are most in line with the probability of loss. Volatility does a lot worse to explain these perceptions. Importantly, risk perceptions turn out to be a strong driver of investing behavior in his study. Risk is a recurring topic also in the parallel sessions. The measurement of risk preferences already highlighted in the keynote is picked up in talks by *Burak Saltoglu* and *Florian Lindner*. *Gesa-Kristina Petersen* presents evidence on how emotional stress contributes to risk aversion. The question of how risk attitudes

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<sup>3</sup> All abstracts of presented papers can be found in the book of abstracts on the conference homepage under <http://ef2016.uni-mannheim.de/index.php/program>.

influence results on market level is addressed by *Dirk-Jan Janssen*. The findings suggest that aggregated market outcomes are largely unaffected by the level of risk aversion of market participants, with the exception of lower trading volume in markets with higher risk aversion.

At the conference, there is a high level of consciousness about potential problems of experimental research, which have been exposed and highlighted in the recent past. This includes issues such as p-hacking, publication bias, multiple hypothesis testing, low power, and reverse engineering of hypotheses. Therefore, about halfway into the conference a plenary session on the robustness and methodology of experimental research is placed. *Jürgen Huber* (University of Innsbruck) presents a large replication study of economic experiments to which researchers from several countries contributed. The authors select 18 prominent laboratory experimental studies published in high impact economics journals. 61 % of the studies replicate, which is far higher than a 36 % replication rate in a similar study in psychology. Still, this research shows that replication efforts are important and should be encouraged. In further presentations, *Zwetelina Iliewa* (ZEW Mannheim) and *Thomas Mayrhofer* (Harvard Medical School) explore the consistency of return expectations and risk preferences, respectively. Iliewa shows that in eliciting beliefs, there are strong effects of whether people are asked for returns or prices and whether the past returns are displayed as price charts or return bar charts. As prior studies and on-going investor surveys strongly differ on these dimensions, this places severe limits on their comparability. In a similar vein, Mayrhofer argues that the display of lottery choices either in reduced or compound form has large and predictable effects on resulting higher order risk preferences (prudence and temperance). In a final presentation, *Peter Bossaerts* (University of Melbourne) suggests to look into the problem solving algorithms of computers to better understand human problem solving. For the example of complexity, he shows that complexity as defined by computer scientists for Turing machines is meaningful for human decision making as well. This opens up new benchmarks for experimental research other than the traditional rationality assumption.

The discussion of robustness and methodology is not limited to the plenary presentations. In the parallel sessions, *Owen Powell* looks into the robustness of mispricing results in experimental asset markets. He reports that most findings are robust to new improved measures of mispricing. *Claudia Biniossek* and *Felix Holzmeister* are concerned with providing a better research infrastructure to improve future experimental research. Biniossek introduces the project X-Hub which is designed to create a repository for experimental data. This should improve scientific practice by making data accessible and understandable to other researchers and making their re-use possible. Holzmeister makes available methods for risk elicitation as ready-to-use modules in the experimental software oTree. This not only avoids programming work of researchers, but also

helps to move to a more standardized way of elicitation. Robustness issues are also brought up by *Yaron Lahav*, who compares different scoring rules in the elicitation of beliefs. He finds no difference between a linear and quadratic scoring rule. The ensuing discussion shows that the field is still divided between proponents of proper incentivization and those who believe that unincentivized experiments will in many cases yield the same results.

What are the trends and new topics in experimental finance? While individual investment decisions and asset pricing remain the core topics, experiments are increasingly used to address research questions in other areas of finance. *Romain Baeriswyl* studies the effects of monetary policy in the laboratory. He compares credit expansion to lump-sum transfers and finds that credit expansion distorts real allocations and relative prices, while lump-sum transfers are neutral in this respect. *Asri Özgümüş* and *Jean Paul Rabanal* analyze the behavior of rating agencies. Özgümüş shows that rating agencies reciprocate rating requests with too optimistic ratings even if they face financial penalties for being untruthful. Rabanal adds that competition among rating agencies significantly reduces the likelihood of misreporting. *Eloisa Campioni* reports results of an experiment on bank runs. In the experiment that mimics the Diamond and Dybvig model, depositors converge to the bank run equilibrium. *Matthias Weber* studies market outcomes in bond markets by introducing a probability of default to the classic asset market design. Despite this increase in complexity, market efficiency turns out to be high after few repetitions. *Corinna Besliu* examines the effects of corporate payout policies and finds a preference for dividends over asset sales even in the absence of meaningful market frictions.

Besides these forages into banking, corporate finance, and monetary policy, another trending topic seems to be gender. *Sascha Füllbrunn* presents a follow-up on a prior study with *Catherine Eckel* in which they show striking gender differences in experimental asset markets. Now the authors show that this gender difference disappears in markets where gender is unknown to participants, pointing to a role of common expectations in bubble formation. *Irene Comeig* studies gender differences in choices under financial risk and uncovers that gender differences in risk taking seem to be limited to downside risks, but is not present in upside risks. *Robert Durand* extends this research question to myopic loss aversion and shows higher loss aversion for women if decisions are made frequently. However, personality traits can explain most of the gender effect, which is evidence that the gender effect is only a proxy for underlying personality characteristics.

The conference ends with the second keynote speech held by *Terrance Odean* (University of California, Berkeley). Odean chooses not to talk about a particular recent study but instead to provide an overview in which way experiments

can contribute to the field of household finance.<sup>4</sup> In particular, he is interested in ways in which behavior can be changed to the benefit of households, who behave sub-optimally. He outlines six ways to change behavior, including education, framing and making salient, nudging, advice, mandatory rules, and social norms. As mandatory rules might be undesirable and social norms hard to create, traditional efforts focus on education and advice. However, choice architecture – under which framing and nudging can be subsumed – might be much more effective. Odean provides many current examples, in some of which expected effectiveness of certain designs is very different from actual effectiveness. In a study by Akbas et al. (2015), financial incentives – the higher, the better – are thought to increase total savings of Kenyan households the most, while a simple and cheap scratch coin turns out to be superior to these monetary incentives. Experiments are thus crucial in determining which choice architecture to select for a specific decision situation. In his presentation, Odean is particularly concerned about some practices in the financial industry that harm consumers, such as predatory lending, self-interested advice, and intentional complexity. Some more examples are provided on how behavior can be changed when facing these practices. He concludes by encouraging experimental researchers to embrace new technology and to venture into the field to conduct experiments that are even closer to the real-life situations households are confronted with.

At the general meeting of the SEF which is held at the conference as well, the president of the Society *Martin Weber* (University of Mannheim) calls for experimental finance to more eagerly address policy-relevant topics and hands over his office to incoming president *Bruno Biais* (Toulouse School of Economics). The meeting also approves the budget of the SEF and votes for a new managing board, headed by *Utz Weitzel* (Utrecht University/Radboud University Nijmegen). It is further announced that next year's Experimental Finance will take place in Nice, France. Local organizer *Nobuyuki Hanaki* (University of Nice – Sophia Antipolis) invites all participants to submit abstracts or papers and to attend the EF 2017.

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<sup>4</sup> The Society for Experimental Finance provides the slides to this keynote on their homepage under: [www.experimentalfinance.org/conferences/past-conferences/ef2016-university-of-mannheim](http://www.experimentalfinance.org/conferences/past-conferences/ef2016-university-of-mannheim).