General Information and Program

(Final Version)

EXPERIMENTAL FINANCE 2011

September 22-24, 2011

DEPARTMENT OF BANKING AND FINANCE

UNIVERSITY OF INNSBRUCK

AUSTRIA

CONFERENCE VENUE

Alpenhotel Speckbacherhof

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www.speckbacherhof.at

General Information

Accommodation and Conference Venue

The conference venue is Alpenhotel Speckbacherhof in Gnadenwald, just outside of Innsbruck (http://www.speckbacherhof.at). After the welcome reception on Thursday (4-6 p.m.) at the Department of Banking and Finance a bus brings us to the conference venue (see information below). Therefore, we very much encourage you to arrive at the Department until no later than 5.30 p.m. For hungry participants: the restaurant will be open after the Thursday evening session ends.

Travel Information

Location of the Department of Banking and Finance (Universitätsstrasse 15, 6020 Innsbruck):
http://maps.google.at/maps?q=Universit%C3%A4tsstra%C3%9Fe+15,+6020+Innsbruck&hl=de&ie=UTF8&ll=47.268717,11.399624&spn=0.011051,0.033023&sll=47.635784,13.590088&sspn=11.239744,33.815918&z=16

The building can be reached in 5 minutes by foot from the railway station. Coming from the airport you either take the bus "F" which stops close to the building (stop is "Congress/Hofburg", takes roughly 20 minutes from the airport) or take a Taxi to "SOWI-Gebäude" (10 to 12 euros, drivers always use taximeter).

Our department is on the fourth floor of the building. In case of problems do not hesitate to call either Jürgen Huber or Mike Kirchler (numbers on next page). We wish you a good trip to Innsbruck and are looking forward to a fruitful conference.

Conference Fee

The conference fee of 100 euros covers the bus to the venue, breakfasts, lunches and dinner, the conference dinner, and coffee breaks (which include a chocolate fountain!).

Chair

The last presenter in each session will act as session chair. Please note that there will be 20 minutes scheduled for presentation and 10 minutes are left for both the discussant (max. 5 minutes) and general discussion (5 minutes). We encourage you to stick to the time schedule to treat each presenter equally.

Discussant

Each presenter will serve as discussant for another paper as well. We encourage discussants to prepare a short presentation with comments and questions on the paper of at maximum 5 minutes (no simple summary). It is the duty of the discussant to acquire the paper he/she has to discuss directly from the presenter. Attached to your confirmation mail, you can find a list of presenters with the corresponding e-mail addresses.

The Organizers

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Sponsors

We thank the following partners for their generous support of this conference:

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For more information on the conference check our homepage:
http://www.uibk.ac.at/ibf/sonstiges/expfin/expfinhome.html

Program (short)

Thursday, September 22, 2011			
1600-1800	Registration/welcome reception at the Department of Banking and Finance, University of Innsbruck		
1800	Bus transfer to the conference venue (Alpenhotel Speckbacherhof, Gnadenwald)		
1930-1940	Welcome address and administrative information		
1940-2110	**Session 1: Market Efficiency I**		
Peter Bossaerts	Caltech and Swiss Finance Institute at EPFL	Discussant: Owen Powell	*An Experimental Study of the Lucas Model of Intertemporal Consumption Smoothing and Asset Pricing* (with Elena Asparouhova, Nilanjan Roy, and William Zame)
Jason Shachat	Wang Yanan Institue for Studies in Economics (WISE)	Discussant: Marc Vorsatz	*Informational Price Cascades and Non-Aggregation of Asymmetric Information in Experimental Asset Markets* (with Anand Srinivasan)
Thomas Stöckl	University of Innsbruck	Discussant: Utz Weitzel	*Insider Trading in Experimental Limit Order Markets*
Friday, September 23, 2011 (Alpenhotel Speckbacherhof, Gnadenwald)			
0800-0900	Registration		
0900-1030	**Session 2: Bubbles in Experimental Asset Markets**		
Tibor Neugebauer	University of Luxembourg	Discussant: Stefan Palan	*Forecasting security prices in experimental call-auction and double-auction markets* (with Reinhard Selten)
Owen Powell	Universidad Carlos III de Madrid	Discussant: Sascha Füllbrunn	*Eye-tracking the Market: Subject Focus in Experimental Bubble Markets*
Martin Holmen	University of Gothenburg	Discussant: Yehuda Izhakian	*Option-like Incentives drive Bubbles – Evidence From Experimental Asset Markets* (with Michael Kirchler and Daniel Kleinlercher)
1030-1100	Coffee break		
1100-1200	**Keynote 1:** Chair: Jürgen Huber (University of Innsbruck)		
Charles Plott	Caltech		*The Micro Anatomy of Price Discovery in Continuous Markets*
1200-1330	Lunch		

1330-1500	**Session 3: Market Efficiency II**		
Marc Vorsatz	Fundación de Estudios de Economia Aplicada (FEDEA)	Discussant: Tibor Neugebauer	*The Effect of Short-Selling on the Aggregation of Information in an Experimental Asset Market* (with Helena Veiga)
Utz Weitzel	Radboud University Nijmegen	Discussant: Yun Dai	*Individual Differences in Investors' Motivational Systems and Fundamental Shocks in Asset Prices* (with Kathrin Muehlfeld and Arjen van Witteloostuijn)
Jürgen Huber	University of Innsbruck	Discussant: Elena Asparouhova	*Multi-Period Experimental Asset Markets With Different Fundamental Value Regimes* (with Michael Kirchler and Thomas Stöckl)
1500-1530	Coffee Break		
1530-1630	**Keynote 2:** Chair: Michael Kirchler (University of Innsbruck and University of Gothenburg)		
Jacob Goeree	University of Zürich		*Package Markets: Exposure in Markets for Substitutes*
1630-1700	Coffee break		
1700-1830	**Session 4: Investment Decisions**		
Elena Asparouhova	University of Utah	Discussant: Doron Sonsino	*Competition in Portfolio Management: Theory and Experiment* (with Peter Bossaerts, Jernej Copic, Brad Cornell, Jaksa Cvitanic, and Debrah Meloso)
Stefan Zeisberger	University of Zürich	Discussant: Jason Shachat	*Do Investors Really Want to Protect Their Capital Against Losses? An Experimental Analysis* (with Meike Bradbury and Thorsten Hens)
Holger Rau	Heinrich-Heine-University Düsseldorf	Discussant: Tommy Gärling	*An Analysis of Team vs. Individual Portfolio Decisions in an Experimental Asset Market*
1900	Conference Dinner		
Saturday, September 24, 2011 (Alpenhotel Speckbacherhof, Gnadenwald)			
0900-1030	**Session 5: Behavioral Finance and Bubbles**		
Yehuda Izhakian	New York University (NYU)	Discussant: Thomas Stöckl	*Ambiguity and Overconfidence* (with Menachem Brenner and Orly Sade)
Stefan Palan	University of Graz	Discussant: Holger Rau	*To See is to Believe: Common Expectations in Experimental Asset Markets* (with Stephen L. Cheung and Morten Hedegaard)
Sascha Füllbrunn	University of Luxembourg	Discussant: Stefan Zeisberger	*Thar "She" Blows? Gender, Competition and Bubbles in Experimental Asset Markets* (with Catherine C. Eckel)
1030-1100	Coffee break		

1100-1300	**Session 6: Various Topics**		
Yun Dai	Erasmus University Rotterdam	Discussant: tba	*Similar Bidders in Takeover Contests* (with Sebastian Gryglewitz and Han T.J. Smit)
Benjamin Roth	University of Heidelberg	Discussant: Peter Bossaerts	*Does Good Advice Come Cheap? On the Assessment of Risk Preferences of Others* (with Andrea Leuermann)
Tommy Gärling	University of Gothenburg	Discussant: Benjamin Roth	*Detrimental Performance Effects of Stock Investors' Short-Term Bonuses* (with Maria Andersson, Martin Hedesström, and Anders Biel)
Doron Sonsino	The College of Management Academic Studies (COMAS)	Discussant: Martin Holmen	*Comparative Analysis of Stock Selection and Return Predictions for Purchase and Sale* (with Eran Regev)
1300	Lunch		

Program (long) and Abstracts

Thursday, September 22, 2011

1600-1800 Registration and welcome reception at the Department of Banking and Finance, University of Innsbruck. You will be guided by information signs from the main entrance!

1800 Bus transfer to the conference venue (Alpenhotel Speckbacherhof, Gnadenwald).

1930-1940 Welcome address and administrative information

1940-2110 **Session 1: Market Efficiency I**

Peter Bossaerts (Caltech and Swiss Finance Institute at EPFL): *An Experimental Study of the Lucas Model of Intertemporal Consumption Smoothing and Asset Pricing* (with Elena Asparouhova, Nilanjan Roy, and William Zame)

We design a novel experiment with which to test the stationary, infinite-horizon, intertemporal consumption allocations and resulting asset pricing restrictions implied by the Lucas model. This model has become the framework with which asset prices in the field are being interpreted, but it assumes that markets equilibrate. This auxiliary assumption cannot be verified separately on field data, which is what our experiment is meant to shed light on. The absence of a persuasive theoretical argument that markets naturally move to the Lucas equilibrium, and the ease with which one can come up with counter-arguments, further motivate our experiment. To emulate an infinite horizon, we use tested protocol, which is to end experimental sessions randomly. To ensure stationarity, we exploit an integral feature of the Lucas model, namely, time-separability of preferences. Our design involves two assets, and we introduce income shocks to ensure that trade remains necessary continuously (in theory). Preliminary results show outcomes that are in line with Lucas' predictions. Foremost, and consistent with Lucas' criticism that the efficient markets hypothesis implies that asset prices must form a random walk, prices changed with the aggregate level of dividends, and therefore inherited the cyclicality in the aggregate dividend process. Relative pricing of the two assets reflected differences in consumption betas. Participants actively engaged in ensuring the right trade-off between immediate cash (consumption) and (investment to generate) future cash (consumption).

Jason Shachat (Wang Yanan Institue for Studies in Economics (WISE)): *Informational Price Cascades and Non-Aggregation of Asymmetric Information in Experimental Asset Markets* (with Anand Srinivasan)

We report on experimental markets for a contingent claim asset that eight subjects traded for nine periods before the state was revealed. There is an informative binary signal that arrives after each of the first eight trading rounds. In our baseline treatment the realization of the signal is public information, and in another treatment, market participants are randomly sequenced and receive the signal as private information. In the latter case, we observe zero information aggregation and prices lock in on home grown norms, which we call informational price cascades. We test the fragility of the price cascades in two further treatments. First, we break the monopoly on each signal by revealing it to two subjects, and then we increase that number to four. It is only when we inform four participants, or one-half of the market, that cascades fail to form and information starts to aggregate in the market.

Thomas Stöckl (University of Innsbruck): *Insider Trading in Experimental Limit Order Markets*

We study experimental limit order markets with varying degrees of insider participation and changing information about the presence of insiders. Each market is populated by six uninformed traders and 0, 1, 2, or 4 insiders who know the buy-back value of the asset. Depending on the information state, none of the traders, only insiders, or all traders are informed about the presence of insiders. Price efficiency is highest in treatments with four insiders, while treatments with one or two insiders exhibit lower degrees of efficiency. In markets without insider participation and no information about their absence we observe trade close to the unconditional expected buy-back value. Further analyzes investigate stylized facts (fat tails), individual trading behavior, and earning across trader groups. A questionnaire on the traders' self reported strategies hints at insiders trying to manipulate market prices.

Friday, September 23, 2011 (Alpenhotel Speckbacherhof, Gnadenwald)

0800-0900 Registration

0900-1030 **Session 2: Bubbles in Experimental Asset Markets**

Tibor Neugebauer (University of Luxembourg): *Forecasting security prices in experimental call-auction and double-auction markets* (with Reinhard Selten)

The forecasting errors of discounted cash flow valuation and relative valuation to pricing of securities of independent companies are studied in a controlled laboratory environment under almost perfect capital market conditions. The paper presents an original experimental asset-market design where production decisions by human managers are responsible for the cash-flows to the firm. In these conditions of cash-flow uncertainty, asset pricing is examined of the two empirically relevant market-institutions; call-auction and double-auction. Our data indicate higher risks of mispricing in the call-auction than in the double-auction, frequently affected by price-jumps that lead to forced asset-liquidations. For both institutions we find that security price-forecasts of the relative valuation approach are generally better than those of the discounted cash flow approach. We also look at behavioral pattern to find that leveraging, momentum trading, and higher trading frequency do not lead to above-average returns.

Owen Powell (Universidad Carlos III de Madrid): *Eye-tracking the Market: Subject Focus in Experimental Bubble Markets*

This paper examines subject focus in experimental asset markets using eye-tracking machines. First, changes in market performance (prices, trade volume) are related to subject focus, providing exploratory insights into how the processing of information precipitates market changes. Second, models of asset market behavior describe and predict the interaction of different types of traders in a market (De Long et al. (1990); Easley and O'Hara (1992)). This study is the first to examine how the visual attention of subjects in an asset market corresponds with the behavioral assumptions underlying the models. Finally, the study allows for the identification of how attention correlates with earnings, gender, and other subject characteristics.

Martin Holmen (University of Gothenburg): *Option-like Incentives drive Bubbles – Evidence From Experimental Asset Markets* (with Michael Kirchler and Daniel Kleinlercher)

Although bubbles in experimental asset markets have been investigated in detail in the last two decades, very little is known about the impact of trader incentives on the efficiency of markets. To get a broad picture about the important role of incentives, we vary the degree of ``riskiness'' of both the incentive structure and the tradable asset. In particular, we set up four treatments in a 2x2 design where we vary the incentive structure (either ``linear'' or ``option-like'') and the riskiness of the underlying asset (either ``low'' or ``high'') to identify drivers of mispricing and overvaluation. We observe (i) very efficient prices in markets with low risk assets and linear compensation schemes. Furthermore, (ii) overvaluation remains unaffected, but mispricing becomes stronger if only the riskiness of the asset is changed to ``high''. Most importantly, (iii) mispricing is very high and strong overvaluation emerges if option-like incentives are introduced, especially when the traded asset is of the high-risk type.

1030-1100 Coffee break

1100-1200 **Keynote 1**

Charles Plott (Caltech): *The Micro Anatomy of Price Discovery in Continuous Markets*
Chair: Jürgen Huber (University of Innsbruck)

The lecture will focus on conjectures and evidence about price discovery in continuous markets. Experiments suggest a subtle interaction between the underlying market micro-structure and behavior that combine to produce price formation and information aggregation. The timing of bid placement has a tendency characterized in a price dynamics principle first postulated by Alfred Marshall. Much of the overall order flow in a continuous market is captured by the classical principle excess demand. The mechanism of price discovery itself, how the market tends to discover the solution to a system of equations, seems to reflect coordination dictated by the market architecture working as a numerical process (like the Newton method of solving equations).

1200-1330 Lunch

1330-1500 **Session 3: Market Efficiency II**

Marc Vorsatz (Fundación de Estudios de Economia Aplicada (FEDEA)): *The Effect of Short-Selling on the Aggregation of Information in an Experimental Asset Market* (with Helena Veiga)

We show with the help of a laboratory experiment that the relaxation of short–selling constraints leads to lower asset prices unless the process of information aggregation is strong enough (in which case no significant treatment effect is found) and increases the overall market efficiency. However, it is not true that short sales help to track fundamentals better in each state. Furthermore, we also evidence that the trade volume increases if short sale limitations are weakened. Finally, and with respect to payoffs, it is established that not only uninformed but also some of the imperfectly informed traders suffer from the weakening of short–selling constraints.

Utz Weitzel (Radboud University Nijmegen): *Individual Differences in Investors' Motivational Systems and Fundamental Shocks in Asset Prices* (with Kathrin Muehlfeld and Arjen van Witteloostuijn)

We analyze investors' coping with fundamental shocks in asset value, depending on individual differences in the sensitivity of two basic neurophysiological systems – the Behavioral Approach System (BAS) and the Behavioral Inhibition System (BIS). Results from an asset market experiment indicate that differences in BAS sensitivity are associated with differences in postshock behavior. High BAS individuals restructure towards more risky portfolios following both positive and negative shocks. Following negative shocks, they underreact strongly. Following positive shocks, their scalping frequency increases but not their profits. High BIS individuals generally forego profitable trading opportunities. However, their behavior and performance is not significantly affected by fundamental shocks.

Huber Jürgen (University of Innsbruck): *Multi-Period Experimental Asset Markets With Different Fundamental Value Regimes* (with Michael Kirchler and Thomas Stöckl)

In this exploratory study we analyze mispricing and overvaluation in multi-period laboratory asset markets, which differ in the development of the fundamental value (FV). We examine six distinct fundamental value

regimes: three extreme cases (deterministically increasing, deterministically decreasing, flat) and three stochastic ones (trinomial, jump-process, normally distributed). We find that under-reaction of price changes to changes in FV is an important issue in all settings, determining results especially in the settings with linearly increasing and linearly decreasing FVs as well as in the setting with jump-processes. Thus, markets with increasing FV-processes usually exhibit undervaluation, while markets with decreasing FV-processes usually exhibit overvaluation. In settings with flat or randomly changing FVs efficiency is usually higher.

1500-1530 Coffee break

1530-1630 **Keynote 2**

Jacob Goeree (University of Zürich): *Package Markets: Exposure in Markets for Substitutes*
Chair: Michael Kirchler (University of Innsbruck and University of Gothenburg)

This paper investigates the exposure problem in markets for items that are substitutes. It is well known that in multi-item auctions an exposure problem can occur when items are complements (the value of winning a set of items exceeds the sum of the values of winning each item individually). In a market setting, an exposure problem can also occur when items are substitutes (the value of a set of items is less than the sum of the values of owning each item individually). For example, a person may be reluctant to sell their house and buy one they prefer if there is a risk that they will make one but not both transactions. Making just one transaction would leave them with either no house or two houses which could be worse than simply sticking with their current house. We find that such exposure problems do occur. In a standard experimental double auction only 20% of the potential gains from trade are realized. However, in a package market that allows trading using swaps, the problem is alleviated and 89% of the potential gains are realized. Package markets have the potential to increase efficiency in a range of settings, for example reallocating licenses to use radio spectrum and reallocating airport resources in bad weather.

1630-1700 Coffee break

1700-1830 **Session 4: Investment Decisions**

Elena Asparouhova (University of Utah): *Competition in Portfolio Management: Theory and Experiment* (with Peter Bossaerts, Jernej Copic, Brad Cornell, Jaksa Cvitanic, and Debrah Meloso)

In this paper we develop a theory about competition for portfolio management and its asset pricing implications and present experimental evidence about this theory. Our theory is essentially an application of the analysis of competition in contracts, as in Rothschild and Stiglitz (1976), to delegated portfolio management. Our application goes one step further: it not only analyzes what contracts will emerge in equilibrium, but also whether pricing in the securities markets is affected. We make the necessary assumptions to ensure that CAPM would obtain in the absence of delegated portfolio management and study to what extent and how CAPM would survive after introducing a competitive portfolio management industry. We assume that investors do not owe the management fee if the final value of the manager's portfolio is insufficient to cover the (back-end loaded) fee. This assumption is crucial in ensuring sharp predictions about the nature of portfolios that managers end up offering in equilibrium: competition forces them to offer Arrow-Debreu contracts and the contracts are priced in accordance to CAPM. Consistent with the theory, we find strong evidence that investors prefer managers whose portfolios are highly variable, thus maximizing the chances of exploiting investors' limited liability. However, manager choices is also partly determined by past performance (specifically, return in the prior period), in spite of absence of any objective reason to believe in the existence of managerial skill. Because of the latter, concentration of holdings across managers increased dramatically in certain rounds. Consistent with our theory, weak CAPM is found to hold, but only in periods where reaction to past performance was insufficiently strong for concentration to increase.

Stefan Zeisberger (University of Zürich): *Do Investors Really Want to Protect Their Capital Against Losses? An Experimental Analysis* (with Meike Bradbury and Thorsten Hens)

To make appropriate investment decisions investors' understanding of the associated risk is essential. However, the literature documents very low degrees of financial literacy among large parts of the population. Against this background analyzing techniques how to enhance investors' understanding of risk is of high importance: the way how risk is communicated might well affect people's understanding and might thus considerably influence their investment behavior (see, e.g. Haisley et al., 2011). In this context we conduct a series of experiments in which subjects are presented with different capital protection products twice. Both times, subjects have to decide in which of the products they want to invest, next to various control questions. For the first decision we describe the relevant underlying return distribution verbally and graphically. For the second decision subjects additionally "experience" the previously described distribution by random sampling of the underlying returns. The sampling does not change the amount of information provided to the subjects, it should, however, present the associated investment risk in a more comprehensible way. Our project extends previous research, in particular the findings of Haisley et al. (2011), in three important ways. First, we apply a within-subject experimental design and thus can analyze whether subjects change their investment behavior due to gained experience. Second, the results of Haisley et al. (2011) might be driven by a relatively long investment horizon (five years) and the fact that investors have difficulties in coping with longer investment periods (see the large body of literature on myopic loss aversion, e.g., Benartzi and Thaler, 1995). Instead, we apply a one year investment horizon and thus analyze the robustness of the previous findings. Third, due to their popularity (generally explained by investors' loss aversion) we concentrate on capital protection products rather than on classical asset allocation decisions. Although experience sampling only changes the way the return distribution is presented and we only offered four financial products, our results reveal that a considerable proportion, namely 40%, of subjects change their product preference in the second decision. The product switches are systematic: subjects choose on average a lower capital protection after they were able to gain some experience and we find no evidence for lower satisfaction with the riskier decisions. Female and inexperienced investors show a higher propensity to revise their first choice. Various control questions allow us to analyze why subjects are willing to accept higher levels of risk. Generally speaking, we find evidence that experience sampling lowers perceived risk. Additionally, our analysis reveals that self-reported risk attitudes (as typically assessed by financial institutions in the advisory process) are more consistent with actual decision making after experience sampling. Overall, our study gives important insights for both research and business practice. From a scientific viewpoint, the way risk is communicated to investors might play a much larger role for investment decisions than was previously assumed. Concerning business practice, financial institutions might be able to increase investors' willingness to take risks (without lowering their satisfaction) by letting investors experience the risk of their investments.

Holger Rau (Heinrich-Heine-University Düsseldorf): *An Analysis of Team vs. Individual Portfolio Decisions in an Experimental Asset Market*

This paper analyzes team and individual decision making in a portfolio choice experiment based on Weber and Camerer (1998). In contrast to prior team decision papers in finance (e.g. Rockenbach et al. (2007) and Sutter (2007)), we use the more realistic approach of an experimental asset market. We analyze buying and selling behavior of teams and individuals to investigate differences in investments. The paper especially focuses on the question whether teams achieve higher performances. Furthermore the paper analyzes what might be the drivers for these results. In this regard it is analyzed whether teams are prone to smaller disposition effects than single investors. In behavioral finance the literature on team experiments is scarce and the results are ambiguous. For example Rockenbach et al. (2007) study whether teams' investment decisions differ from those of individuals. They do not find significant differences between teams and individuals in terms of maximizing expected utility. Sutter (2007) finds that teams and individuals show the same degree of myopic loss aversion. In contrast, evidence is found that teams invest higher amounts. However all of these papers use non-market environments to study team effects. In contrast our paper uses a market environment to control for team differences in investment behavior and the occurence of the disposition effect. The disposition effect describes a certain investment behavior where investors tend to sell more winning stocks compared to loosing stocks. Focusing on single investment behavior the prevalence of the disposition effect is well documented (e.g.

Lakonishok and Smidt (1986), Ferris et al. (1988) and Odean (1998)). Only few papers investigate the disposition effect in the laboratory (Weber and Camerer (1998), Chui (2001) and Weber and Welfens (2006)). Weber and Camerer (1998) were the first to run an experiment where subjects had to made portfolio decisions for six risky assets whose prices fluctuated in every period. The authors find that investors were prone to a disposition effect, even in the laboratory. To the best of our knowledge there exists no paper which analyzes team decisions in experimental asset markets. Less is known about the differences of single and team portfolio choices in the environment of experimental stock markets. To analyze these questions we use two treatments. Our baseline treatment is a replica of Weber and Camerer (1998) where one investor has to invest in six risky assets. In our team treatment, teams of two investors both decide on joint investment decisions. Due to increased rationality and self-control we expect that teams are prone to smaller disposition effects than individuals. This should lead to higher payoffs compared to single investors. Preliminary results show that subjects in the single treatment show disposition effects to the same amount as in Weber and Camerer's (1998) study. Furthermore teams were also prone to disposition effects. Additionally teams showed higher investment levels than individuals and outperform single investors. This result is in line with Sutter's (2007) finding.

1900 Conference Dinner

Saturday, September 24, 2011 (Alpenhotel Speckbacherhof, Gnadenwald)

0900-1030 **Session 5: Behavioral Finance and Bubbles**

Yehuda Izhakian (New York University): *Ambiguity and Overconfidence* (with Menachem Brenner and Orly Sade)

There are two phenomena in behavioral finance and economics which are seemingly unrelated and have been studied separately; overconfidence and ambiguity aversion. In this paper we are trying to link these two phenomena providing a theoretical foundation supported by evidence from an experimental study. We derive a model, based on the max-min ambiguity framework that links overconfidence to ambiguity aversion. In the experimental study we find that overconfidence is decreasing in ambiguity, as predicted by our model.

Stefan Palan (University of Graz): To See is to Believe: Common Expectations in Experimental Asset Markets (with Stephen L. Cheung and Morten Hedegaard)

Experimental asset markets of the type introduced by Smith, Suchanek and Williams (1988) are known to produce price bubbles and crashes with inexperienced subjects. We investigate whether this phenomenon may be explained by trader uncertainty about the behavior of others. In particular, we induce individual rationality by requiring participants to correctly answer an extensive set of control questions. With this in place, common expectations are then manipulated by varying the knowledge that traders have regarding the fact that all other market participants are also required to answer these questions. We find that markets in which this common knowledge is absent do not differ significantly from baseline markets in which traders do not answer control questions. However, when it is common knowledge that all must answer the questions correctly, we find that mispricing is essentially eliminated in four out of six markets and is small in the remaining two.

Sascha Füllbrunn (University of Luxembourg): *Thar "She" Blows? Gender, Competition and Bubbles in Experimental Asset Markets* (with Catherine C. Eckel)

Financial bubbles robustly appear in experimental asset markets. In this paper we employ the Smith et al. (1988) design to investigate the role of competitiveness in producing financial bubbles. Our approach is to conduct standard asset market experiments with all male and all female markets and compare treatments using established bubble measures. A number of studies have shown that women are less competitive than men, and that their competitiveness varies with group gender composition. By conducting single-gender sessions, we effectively can control not only for competitive preferences, but also for beliefs about the competitiveness of other group members. We collect survey based information on competitiveness, risk attitudes and personality. Our main result show that all female markets produce 'negative' bubbles, i.e. prices below fundamental values than all male markets, where we observe bubbles as reported in other experiments. Surprisingly, volume is higher in all female treatments; however, only at the beginning of the markets. Earnings are more dispersed in female than in male treatments, i.e. low income subjects earn less in the female treatment while high income subjects earn more. Elicited price expectations differ across gender; especially, females underestimate first period prices while males rather overestimate first period prices. Finally, the collected survey based information provides some insights in the reported bubble differences across gender.

1030-1100 Coffee break

1100-1300 Session 6: Various Topics

Yun Dai (Erasmus University Rotterdam): *Similar Bidders in Takeover Contests* (with Sebastian Gryglewitz and Han T.J. Smit)

When bidders in a corporate takeover have related resources and post-acquisition strategies, their valuations of a target are likely to be interdependent. This paper analyzes a theoretical model and a laboratory experiment of sequential-entry takeover contests in which similar acquirers have correlated private valuations. Increased similarity between bidders has two effects on equilibrium bidding strategies. On the one hand, informational externalities of early bids from similar rivals induce participation in the contest. On the other hand, a bidding competition between similar bidders makes participation less attractive. The model predicts that expected acquisition prices and the probability of multiple-bidder contests are the highest for intermediately similar bidders. Our laboratory experiments indicate overbidding and excessive participation compared to the equilibrium. Accounting for acquirers' "joy of winning," the experiments support the theory.

Benjamin Roth (University of Heidelberg): *Does Good Advice Come Cheap? On the Assessment of Risk Preferences of Others* (with Andrea Leuermann)

Risk preferences are an integral part of everyday decisions and influence people's choices. People increasingly ask for advice as decisions become more complex or are beyond their knowledge, in particular in financial or health domains. Consequently, the correct assessment of the advisee's risk preferences by the advisor is crucial for a precise advice. However, not much is known about the ability of advisors to judge the risk preferences of others to date. The aim of our study is to investigate whether individuals are capable of assessing others' preferences, in particular risk preferences. On the basis of sociodemographic and visual assistance, subjects are asked to determine the lottery choices of the presented individuals. Furthermore, we study which characteristics of these individuals are most important and whether the quality of assessment increases in the amount of information presented. Our results show that knowledge about sociodemographics is substantial and that this knowledge is transformed into the assessment of risk preferences of advisees. Furthermore, we find that subjects on average value themselves as more risk loving than the person evaluated. Interestingly, sociodemographic similarities are vital insofar as subjects evaluate people with similar characteristics more closely to their own self-assessment. Subjects in the role of advisors take their own decision as a reference point for predicting others' risk preferences.

Tommy Gärling (University of Gothenburg): *Detrimental Performance Effects of Stock Investors' Short-Term Bonuses* (with Maria Andersson, Martin Hedesström, and Anders Biel)

Performance-related components or bonuses in the finance sector are considered important tools to provide incentives. When considering the effects of prolonging the frequency of monitoring stock portfolio managers' performance, it is important to address the effect on investment performance of the length of the evaluation interval. For short-term bonuses the evaluation interval is shorter than for long-term bonuses. In order to investigate whether longer evaluation intervals lead to superior performance two experiments were carried out in which participants role-played employees of an investment firm mandating them to purchase stock lots for a client at a set maximum price. In each of 15 trading days the participants either decided to purchase or postpone purchase until the next trading day. The prices either varied randomly for the set purchase price or for a negative price trend such that on each trading day the average price deviated progressively more from the set price. Overall, the results indicated that participants' impatience made them purchase the stock lot at higher than the lowest prices. In Experiment 1, employing 80 undergraduates, the bonus was reduced for each trading day in one condition (mimicking a short-term bonus) and constant in another condition. Demonstrating the negative effects of short-term bonuses, the results showed that the decreasing bonus further triggered participants' impatience which made them purchase the stock lots even earlier such that their performance became worse. Experiment 2, employing another 64 undergraduates, investigated whether participants' tendency to be impatient is prevented by introducing a bonus that increases with trading days, thus mimicking

a long-term bonus. However, an increasing bonus only had a marginal effect on participants' purchase decisions.

Doron Sonsino (The College of Management Academic Studies (COMAS)): *Comparative Analysis of Stock Selection and Return Predictions for Purchase and Sale* (with Eran Regev)

We run an exploratory field experiment to test return prediction and stock selection in field purchase and sale decisions. The core experimental task consisted of 5 binary stock-purchase problems and 5 similar binary stock-sale tasks. In each buy-side problem, subjects were requested to select the best stock for purchase under the assumption that a special consulting bonus could be paid if the selected stock outperforms the alternative in 3-months horizon. Sale-side problems were similarly defined, and subjects were requested to deliver 90% confidence intervals for the 3-months return on the stock selected in each purchase/sale assignment. To explore prediction and selection patterns on a general, ecologically valid platform, we randomly draw the stocks for purchase and sale, for each questionnaire, from the list of 25 largest stocks in the Israeli market (TA25). Ninety-five qualified participants (mean age 33; 55% holding or pursuing an MBA degree; 16.5 mean years of formal education) delivered legible questionnaires from OCTOBER 2010 to APRIL 2011. The bottom-line results for the choice tasks reveal slightly "worse than random" performance. The average correct stock-selection rate along the 95 questionnaires is 47.7% with median 50%. The correct choice rate of almost half the sample is strictly lower than 50%, while only 1/3 beats the random-selection benchmark. The success rate in BUY-side problems (48%) is similar to the rate for the SELL-side problems (47%) and the Pearson correlation between success rates is positive but insignificant 0.12. The results for the confidence interval tasks parallely reveal extreme rates of over-confidence. Under perfect calibration, eventual returns should fall within the confidence intervals in 9 of 10 cases, revealing a "hit-rate" of 90%. The actual average hit-rate along the 95 questionnaires is only 27.4%, with more than 96% of the participants exhibiting overconfidence in terms of hit-rate strictly lower than 90%. The judgmental forecasting literature suggests that overconfidence (in confidence interval tasks) typically increases with the difficulty of the problem. Our field prediction tasks intuitively classify as very challenging forecasting assignments (especially in light of the sluggish market conditions under which the experiment was run). The level of miscalibration in our data is indeed similar in magnitude to the most extreme levels documented in recent literature (miscalibration rates in earlier psych studies are significantly lower, around 50%). Interestingly the data suggests that while prediction intervals are significantly longer on the buy-side, hit-rates are significantly larger on the sell-side. The apparent inconsistency is resolved in closer examination of prediction patterns across assignments.

1300 Lunch