Second Workshop on Experimental Economics and Entrepreneurship

Sponsored by Copenhagen Business School thanks to a generous grant from the The Mærsk Mc-Kinney Møller Foundation and Florida State University thanks to a generous grant from the Kauffman Foundation.

Friday 4 May
8:45 Arrival at CBS. Kilen Campus, Kilevej 14, DK-2000 Frederiksberg.

INTRODUCTORY REMARKS

9:00-9:40: Alexander Sebald: Self-confidence and reactions to subjective performance evaluations
Subjective performance evaluations are commonly used to provide feedback and incentives to workers. However, such evaluations can generate significant disagreements and conflicts between management and workers, the severity of which may be driven by many factors. In this paper we show that a workers’ level of self-confidence plays a central role in shaping reactions to subjective evaluations – over-confident agents engage in costly punishment when they receive evaluations below their own, but provide limited rewards when evaluations exceed their own. In contrast, under-confident agents do not significantly react to evaluations below their own, but reward significantly evaluations exceeding their own. Our analysis exploits data from a principal-agent experiment run with a large sample of the Danish population, varying the financial consequences associated with the evaluations workers receive. In contrast to existing economic models of reciprocal behavior, reactions to evaluations are weakly related to the financial consequences of the evaluations. These results point towards a behavioral model of reciprocity that intertwines the desire to protect self-perceptions with over-/underconfidence.

9:40-10:20 Monica Capra: Are (active) entrepreneurs a different breed?
We present data from an incentivized online experiment and responses from a set of validated psychological questionnaires to characterize (active) entrepreneurs. The experiment measured traits such as motivation, optimism, confidence, and satisfaction, as well as risk and time preferences. Participants in the study included members of entrepreneurial organizations and students enrolled in executive business entrepreneurship programs in the US. Our data show that personality traits influence the likelihood of becoming an active entrepreneur (i.e., running a business), and they correlate with individual measures of risk and time preferences. Indeed, individuals who scored higher on drive were more risk seeking. Those who scored higher on pessimism were more patient. All in all, our results support the idea that individual personality profiles play a role in explaining economic preferences and in predicting active entrepreneurship.

10:20-10:50 coffee break

10:50-12:30: PARALLEL SESSION 1: DISCUSSANT: STEFFEN ANDERSEN

25 MINUTES PER PRESENTATION FOLLOWED BY 5 MINUTES DISCUSSION.

Scott Shane: The Pros and Cons of Pitch Training: Evidence from a Field Experiment
With the rise of accelerators, the growth of angel groups, and the increased sophistication of entrepreneurship programs, pitch training has become an integral part of entrepreneurship education. To date the practitioner and academic literature on pitch training has been decidedly one-sided, extolling the virtues of such training, without considering its drawbacks. We discuss arguments for the downside of pitch training and test them empirically through a field experiment that randomly assigned pitch training to 273 would-be entrepreneurs at four elevator pitch competitions. While training improved aspects of pitches that are attractive to investors, it also disrupts their delivery.

Daniela Grieco: Creativity and corporate culture
Creative problem-solving by corporations is frequently done within a group or team framework. A
relevant issue is which type of corporate culture is most effective in enhancing performance in creative tasks. We present a model and a series of experiments that aim at exploring group creativity in contexts where corporate culture promotes cooperation or competition among group members. Our experimental results show that cooperative corporate culture fosters creativity. The structural model identifies the reason of success in the presence of positive peer group externalities deriving from cooperation.

Andrea Contigiani: Experimentation in Early-Stage Ventures
I will present ongoing work on experimentation in early-stage ventures. First, I will discuss non-experimental evidence based on a hand-collected dataset of US-based software ventures. This study primarily looks at the role of appropriability in driving propensity to experiment and value of experimenting. Second, I will describe the design of a field-based RCT seeking to estimate the causal effect of experimentation on performance. This approach focuses on the role of the learning process associated to experimentation, trying to identify the team-level and product-level conditions under which adaptation to market feedback is most effective.

Chiara Spina: Small Changes with Big Impact: Experimental Evidence of a Scientific Approach to Decision Making of Early-stage Entrepreneurial Firms
This study examines the impact of a scientific approach to decision making on early-stage entrepreneurial firms. In these early-stage projects, we argue that using a scientific approach to decision making leads to a higher chance to uncover false positives and false negatives associated with new business ideas. We hypothesize that this precision helps entrepreneurs to understand both if their ideas will have negative financial returns and if tweaking their ideas (pivoting) can lead to more positive financial returns. We embed a field experiment in a pre-accelerator program geared towards early-stage entrepreneurial firms and use this initiative to treat a group of entrepreneurs (130 entrepreneurial teams) by training them on how to use a scientific approach to business development. The control group (128 entrepreneurial teams) receives the same amount and type of training but is not taught to use a scientific approach to business development. Consistently with our predictions, we find that the use of a scientific approach affects the decision of entrepreneurs to abandon their entrepreneurial idea. Our results suggest that, for treated entrepreneurs, a key mechanism behind the decision to abandon a business idea is precision, given that these entrepreneurs – thanks to the adoption of a scientific approach – become more aware of the mistakes they make when assessing the potential of their business idea.

Yaroslav Rosokha: Motivating Innovation: The Effect of Loss Aversion on the Willingness to Persist
We investigate the willingness of individuals to persist at exploration in the face of failure. Prior research suggests that the organization’s “tolerance for failure” may motivate greater exploration by the individual. Little is known, however, about how individuals persist at exploration in an uncertain environment when confronted by prolonged periods of negative feedback. To examine this question, we design a two-dimensional maze game and run a series of randomized experiments with human subjects in the game. Our results suggest that individuals explore more when they are reminded of the incremental cost of their actions, a result that extends prior research on loss aversion and prospect theory to environments characterized by model uncertainty. We discuss implications for future research and managers.

Krista Saral: Characterizing the Entrepreneur Using Experimental Economics
We study decision making by graduate students and entrepreneurship program participants in a variety of individual and group settings. Nascent and current entrepreneurs differ from non-entrepreneurs along several dimensions. Nascent entrepreneurs are more trustworthy than non-entrepreneurs and current
entrepreneurs, and are also more likely to be overconfident. While current and nascent entrepreneurs are no more likely to choose competitive pay schemes than others, they react to competition by performing better. Current and nascent entrepreneurs are less cooperative, more patient, and more honest than non-entrepreneurs. Nascent entrepreneurs are surprisingly different than current entrepreneurs, including being far more likely to be women.

12:30-14:00 lunch

Rotunden, Solbjerg Plads Campus

14:00-15:40 PARALLEL SESSION 1: DISCUSSANT NICOLA LACETERA

25 MINUTES PER PRESENTATION FOLLOWED BY 5 MINUTES DISCUSSION.

Lea Cassar: Intentions for Doing Good Matter for Doing Well: The (Negative) Signalling Value of Prosocial Incentives

Prosocial incentives and Corporate Social Responsibility (CSR) initiatives are seen by many firms as an effective way to motivate workers. Recent empirical results seem to support the expectation that prosocial incentive, e.g. in the form of a charitable donation by the firm, can increase effort and motivation -- sometimes even better than monetary incentives. We argue that the benefits crucially depend on the perceived intention of the firm. Workers use prosocial incentives as a signal about the firm’s type and if used instrumentally in order to profit the firm, they can backfire. We show in an experiment in collaboration with an Italian firm, that monetary and prosocial incentives work very differently. While monetary incentives used instrumentally increase effort, instrumental charitable incentives backfire compared to non-instrumental incentives. This is especially true for non-prosocially-motivated workers who do not care about the prosocial cause but use prosocial incentives only as a signal about the firm. The results contribute to the understanding of the limits of prosocial incentives by focusing on their signaling value to the agent about the principal’s type.

Alexia Delfino: Trust in the city. Theory and evidence from small-scale entrepreneurs in Lusaka, Zambia

The rapid urbanization of developing countries offers new opportunities to small-scale entrepreneurs, who represent more than 70% of firms in Sub-Saharan Africa. Yet it is unclear whether the benefits of agglomeration, such as labour market pooling or knowledge spillovers, can accrue in environments with weak formal or informal institutions. In the absence of a strong court system, interpersonal trust crucially defines the set of contracts available to entrepreneurs. Several studies have indeed shown that trust is positively correlated with economic development (Knack and Keefer, 1997). However, the effect of cities on trust is ambiguous. While cities increase the scope for social interactions and information flow, they also increase monitoring costs, inducing greater moral hazard. If urbanization depletes trust and social capital, the positive externalities generated by proximity may be left unexploited. This study is among the first to explore how the local institutional context interacts with trust to affect entrepreneurial behaviour in cities of the developing world. We address this topic combining theory with survey and lab-in-the-field empirical evidence.

Emily Nwkapuda: Entrepreneurs’ Support of Scientific Research: Empirical Evidence from an Experimental Survey

Individual donors are an increasingly important, but underexplored, source of funding for scientific research at institutions of higher education. Often these donors are wealthy entrepreneurs and it is difficult to discern the motives of individual donors. This paper utilizes a scenario based experiment to provide evidence of what motivates individuals, especially entrepreneurs, to fund scientific research. The experimental design randomizes participants into treatments to test individuals’ willingness to support academic research initiatives. The scenarios represent varying levels of scientific innovation and funding needs. Treatment conditions seek to understand how individuals’ willingness to give is effected by the giving behavior of others (herd effect), tax incentives, and prestige (an ask by prominent leaders).
Entrepreneurs’ preferences for supporting scientific research are compared to individuals in the general population. The economic and ethical implications of prospective donors’ motivations for supporting academic science will be discussed within the context of the trajectory of scientific and technological innovation.

14:00-15:40 PARALLEL SESSION 2: DISCUSSANT DAVID COOPER Ks.71

25 MINUTES PER PRESENTATION FOLLOWED BY 5 MINUTES DISCUSSION.

Anisa Shytii: Ambiguity Attitudes and the Relevance of Entrepreneurial Intention: An Experiment
Ambiguity is ubiquitous in entrepreneurial decisions. However, recent studies show no difference in ambiguity attitudes of entrepreneurs and non-entrepreneurs, in stark contrast with classic and contemporary entrepreneurship theory. Through a within-subject experimental design, I measure individual ambiguity attitudes in two conditions that are quantitatively equivalent, but differ in terms of framing. In the chance condition, participants are told that environmental contingencies matter for the likelihood of success, and in the skill condition participants are told that skill matters in influencing the likelihood of success. Participants’ entrepreneurial intention and overconfidence were collected prior to the experimental task. The findings show that, first, ambiguity attitudes are likelihood-dependent. Second, in the chance condition participants predominantly exhibit ambiguity aversion in the skill condition, findings show a prevalence of ambiguity seeking, consistent with a source-preference effect or, more generally, context-dependence. Overconfidence, orthogonal to entrepreneurial intentions, does not explain the observed differences in ambiguity attitudes between chance and skill conditions. Finally, entrepreneurial intention is relevant to the skill condition only, where it reinforces the source preference effect, or the tendency to seek ambiguity. The focus on ambiguity attitudes in skill-related contexts and the relevance of entrepreneurial intention is novel, and it contributes to the microfoundations of entrepreneurship theory.

Martina Vecchi: Groups and Corporate Social Responsibility Production
With a field experiment with farmers I study the impact of group decisions on Socially Responsible behaviour. Producers participating to a fair were asked to perform real purchase decisions for their firm between an ethical or unethical good. In particular I vary the number of decision makers (1 or 3) and of the number of people whose payoff is affected by the decision. Increasing the number of decision makers could produce a diffusion of responsibility, increasing unethical choices. The responsibility for the payoff of others might diffuse the guilt in behaving unethically leading as well to more unethical choices.

Ahmad Barirani: Is There a Wage Premium to Self-Employment in the Labor Markets? Evidence from a Field Experiment
This paper provides field experimental evidence on whether self-employed workers enjoy a wage premium or whether they are stigmatized when they transition back to paid work. Fictitious resumes are sent out to job openings and callbacks for interviews are recorded. It is found that those who transition out of self-employment are less likely to be called back than those who have never experienced self-employment. However, those who were self-employed in the past but have since accumulated experience in paid employment are not less likely to receive a callback. These results suggest that there is a wage penalty associated with self-employment, and are consistent with the idea of employers having preference for workers with specific (rather than general) skills.

15:40-16:20 Coffee break Atrium

16:20-17:00 Steve Leider: Entrepreneurial Market Research Ks.71
In “technology-push” (relative to “demand-pull”) innovation, entrepreneurs often develop a new technology that has potential applications in a wide range of industrial settings. However, limited resources and time constrains the ability to explore each potential market in great depth, or even all of them at any depth. We
characterize the entrepreneurial market search process as a variant of a bandit problem with several distinctive characteristics: (a) the number of options exceeds the number of possible samples, (b) only the final choice determines the entrepreneur’s payoff, (c) the structural and/or informational risk of the chosen option matter, and (d) decision heuristics need to be human implementable. We then simulate how various bandit heuristics perform in this setting. We also test experimentally how human decision makers perform when given advice based on several of the heuristics.

17:00–17:40 Florian Englmaier: Motivation and Coordination – A Field Experiment on Leadership Functions and Team Performance in Non-Routine Analytical Team Tasks

Innovative working environments are frequently characterized by flat hierarchies in which project teams face non-routine, analytical team tasks. These tasks require team members to exert cognitive effort, stay motivated and work in a coordinated manner. Teams may thus benefit from selecting a team leader who may make use of her personal abilities to motivate her followers (see, e.g. House, 1977, Bass, 1998, 1999 and Howell & Avolio, 1993) or coordinate her team members in the interest of the organization or group (see e.g. Bass, 1990 and House et al., 1999). While the literature on leadership has acknowledged the potential importance of motivation and coordination as leadership functions, causal evidence on the effectiveness of these specific leadership functions is scarce, because in most working environments leaders and leadership styles are chosen endogenously. In the current study, we conduct a field experiment in a unique setting in which more than 250 teams work on a non-routine team task. The setting allows us to encourage randomly selected teams to choose a leader, who has a specific function (motivation or coordination). Before teams start working on the task, our two treatment groups are told to select a leader, who fulfills a specific leadership function, whereas our Control group is not. In treatment Motivation we ask teams to jointly decide on a team member, who takes on “the role of a leader and motivates the team”. In treatment Coordination we ask teams to jointly decide on a team member, who takes on “the role of a leader and coordinates the team”. Using an objective measure of team performance, i.e. the time teams need to solve the non-routine task, we identify the benefits from both leadership interventions. Additionally, the setting allows us also to study to what extent the two leadership styles affect teams’ willingness to explore original solutions.

19:30- dinner at Restaurant Ofelia, The Royal Danish Theater (registration necessary)

Saturday 5 May

9:30-10:10 Orsola Garofalo: Learning by Mistaking? Optimism and Entrepreneurial Innovation

Existing research shows that entrepreneurs tend to be overly optimistic about the prospects of their ventures, and that such optimism can harm firm performance. To understand the cognitive mechanisms behind this result, our paper analyzes how entrepreneurial optimism shapes the update of beliefs in response to a negative feedback, and then explores the nexus between optimism and innovative efficiency. We use a unique dataset that combines firm-level information with a lab-in-the-field experiment involving entrepreneurs. Our evidence suggests that optimism impairs the process of beliefs update following a negative feedback. This result has harmful implications for new ventures: entrepreneurial optimism triggers a discrepancy between inputs and innovation outputs thereby reducing a firm’s innovative efficiency.

10:10-10:50 Hakan Holm: How do Entrepreneurs Act and Form Beliefs in Strategic Games? – A Lab in the Field Experiment in China

This presentation will focus on a study where Chinese entrepreneurs of medium-size firms participated in three incentivised strategic games—Prisoner’s Dilemma, Chicken, Battle-of-the-Sexes. The entrepreneurs’ beliefs about others’ behaviour in these games were also elicited. Comparisons with various groups, including a carefully selected control group will be discussed and reported. The most striking results are that entrepreneurs do not best respond to their own beliefs and that they are closer to the socially optimal strategy profile and thereby as a group earn much more than the control group.
10:50-11:20 coffee break

11:20-12:00 Scott Shane: Exploring neural engagement and founder passion in entrepreneur pitch assessments: an fMRI study*
We explore how variation in entrepreneurs’ passion affects investor interest in start-up ventures by using functional Magnetic Resonance Imaging (fMRI) to examine neural responses to entrepreneurs’ pitches in a randomized controlled trial. We find that founders displaying high passion increase investor neural engagement by 7 percent over those displaying low passion, and that one standard deviation increase in neural engagement leads to a 5 percent increase in investors’ interest in investing in a start-up company. Moreover, our findings indicate that neural engagement partially mediates the effect of founder passion on investor interest, suggesting that neural engagement is one mechanism through which founder passion attracts investors. We discuss the implications of these results for both research on, and the practice of, entrepreneurship.

12:00-12:40 Ronnie Chatterji: When does Management Advice Impact Startup Performance? Experimental Evidence from a Founder Retreat
When do entrepreneurs benefit from advice about managing their firm? Recent research shows that firm performance differs markedly because of differences in management quality, and this performance gap has persisted despite efforts to improve founders’ business skills. To study which founders and firms can learn and implement management practices we conducted a randomized field experiment with 100 high-growth technology firms who received advice from founders who varied in their managerial experience. We find that founders who received help from active managers experience significant employee growth two years after the intervention and are more likely to survive. Our results suggest that peer advice especially shapes business performance for firms led by founders lacking business education or incubation. ‘Good’ and ‘bad’ advice can respectively shape entrepreneurial performance when formal business training is under-provisioned.

12:40-13:40 lunch

13:40-14:20 Brent Goldfarb: Entrepreneurs, signaling and education
This paper applies signaling theory to understand educational choices of undergraduate entrepreneurs and non-entrepreneurs. According to signaling theory, college education has substantial signaling value for those looking for a job after graduation. If GPA is a central observable signal, job-seeking students will exert effort even in courses that they perceive will not enhance their productivity. In contrast, entrepreneurs whose are not job seeking will allocate effort to courses they perceive will enhance their productivity and deemphasize courses which do not. We empirical examine this hypothesis in a sample of 5,729 students from a major public university and find that entrepreneurs exhibit lower grades and higher grade variance than non-entrepreneurs.

14:20-15:00: Glenn Harrison: Entrepreneurs and the Entry Decision
Do entrepreneurs exhibit more over-confidence in their own skills, leading to excess market entry? Building on previous laboratory experiments we propose experimental tasks to identify and test the hypothesized characteristic of over-confidence and its alleged impact on the entry decision. Taking these tasks into the field we identify and find striking differences between two types of entrepreneurs, which we call full-time and part-time entrepreneurs. Part-time entrepreneurs appear extremely reluctant to enter markets where profitability is based on their perception of their relative skill ability. On the other hand full-time entrepreneurs and non-entrepreneurs do not exhibit any systematic over-confidence in their relative skill abilities. Our results support the notion that entrepreneurs are rational and do not exhibit excess entry due to over-confidence as many have claimed.

15:00-15:20 wrap up