IGL Winter Research Meeting 2018

13 December 2018

Agenda subject to change

Time	Session
10:00 AM – 10:30 AM	**Registration & refreshments**
10:30 AM – 10:35 AM	**Welcome and introductions**
10:35 AM – 11:25 AM	**Increasing Quantity Without Compromising Quality: How Managerial Framing Affects Intrapreneurship** **Coen Rigtering,** Utrecht University* **Utz Weitzel**, Utrecht University **Katrin Muehlfeld-Kerstan,** University of Trier *Managerial communication is vital to the success of intrapreneurship. However, little is known regarding how managerial framing affects the effectiveness of intrapreneurial suggestion systems. Integrating self-determination theory, creativity research, and literature on framing, we theorize how different ways of inviting employees to submit intrapreneurial proposals (opt-out versus opt-in registration for submission; provision of examples) affects the number and quality of submitted ideas. Our multi-method study (field experiment, online vignette experiment, interviews) shows that (i) opt-out increases participation without reducing idea quality and (ii) the provision of examples enhances the usefulness of ideas but decreases novelty and the number of submissions.*
11:25 AM – 12:15 PM	**The Effect of Business Coaching on NTBF Survival - First Data Analysis and Lessons Learned half way through a Randomized Controlled Trial** **Christina Ungerer**, IST Institute, Konstanz University of Applied Sciences (HTWG) **Nicolai Heinzelmann**, IST Institute, Konstanz University of Applied Sciences (HTWG)* **Guido Baltes**, IST Institute, Konstanz University of Applied Sciences (HTWG) **Marc König,** bwcon GmbH Business coaching is believed to effectively improve survival and success chances of new technology-based firms (NTBFs). Therefore, innovation intermediaries commonly provide coaching as a support measure transferring expertise and knowledge of experienced coaches to the founder team. However, not much empirical evidence is available concerning the causal effects on venture survival. A deeper understanding of the impact of coaching activities may enable accelerators and entrepreneurship program providers to optimize their activities and thus foster NTBF survival and business growth. A pragmatic two-armed RCT represents our basic study design testing the effect of tactical business coaching on the survival capabilities of technology-based early-stage ventures. Over three years, from 2016 until 2018, 450 NTBFs from the German regional state Baden-Württemberg are recruited. The treatment group encompasses 150 ventures in total, each year about 50 being subject to the intervention. Not having been specifically coached, another 300 ventures serve as the control group. To take account for the relatively small sample size, restricted randomization is used to allocate NTBFs to the groups. Accredited, experienced coaches are imparting tactical knowledge to the founder teams in the form of

	individual support sessions. The current status of the RCT reveals deviations from the planned trial design that impede a valid assessment of the data available at this point. More than two thirds of the experiment time have passed, and half of the interventions have been carried out. Major flaws arise due to a lower than expected sample size and great attrition between groups affecting the trial tests. At this stage, a half-way data analysis is being conducted based on the follow-up data that has been collected for the teams entering the experiment in 2016 and 2017. First data analyses based on the intention to treat (ITT) principle do not reveal significant differences between the two groups regarding survival capability. Against expectations, additional calculations that do not respect the ITT principle also do not provide statistically significant findings. Continuing the RCT does not seem recommendable since even a best-case scenario for 2018 does not provide a sufficiently large minimum detectable effect size. The data suggests that a longer experiment duration is needed to allow for potential effects of business coaching to become apparent in the NTBF survival capability measure. Some lessons learned about how to deal with trickle samples and experiment constellations involving third parties carrying out the intervention can be drawn from the business coaching RCT.
12:15 PM – 1:15 PM	**Lunch**
1:15 PM – 2:05 PM	**SME adoption of new technologies and business performance: a randomised controlled trial** **Anna Sivropoulos-Valero**, London School of Economics* *A factor underlying the poor productivity performance in a number of countries in recent years has been an underinvestment in ICT technologies and business practices. Such issues have applied in particular amongst SMEs, and in the "low wage sectors", which include retail and hospitality - both large employers in many OECD countries. As yet, little is known about the causal effects of policies that seek to stimulate the adoption of new technologies, and their impacts on business performance. This randomised control trial, currently in the design phase, will seek to understand what type of intervention (light-touch versus more targeted) works for encouraging SME adoption of cutting-edge but tried and tested technologies, and stimulating innovation and productivity improvements more broadly.*
02:05 PM – 02:55 PM	**A Systematic Approach to SME Productivity** **Arnaldo Camuffo,** Bocconi University **Teppo Felin,** Said Business School **Alfonso Gambardella,** Bocconi University **Elena Novelli,** Cass Business School* **Chiara Spina,** Bocconi University * This project studies the use of a systematic approach to decision making on SME productivity. The intuition behind this study is that having a systematic approach provides SMEs with a rigorous basis to select the most productive strategies for their business. When using this approach, they are less likely to select a strategy when it is rather more promising to pivot to a new one (avoiding "false positives"), and they are less likely to pivot to a new strategy when it is more promising to continue with their current one (avoiding "false negatives"). For this study, a training programme will be provided to two groups of SMEs (control and treatment). The participating SMEs will be monitored over a

year to understand whether there are any differences in the performance of the two groups.
This study builds on rigorous evidence produced by two pilot randomised controlled trials (RCTs) conducted with new firms in Italy, which showed that firms in both groups performed better than a randomly selected sample of firms that could not be included in the programme, but that firms in the treatment group performed five times better than those in the control group.

02:55 PM – 03:20 PM	**Break**
03:20 PM – 04:10 PM	**Hiring, Productivity, and Algorithmic Matching in Labour Markets with Information Frictions** **Lukas Hensel,** University of Oxford* **Robert Garlick,** Duke University **Kate Orkin,** University of Oxford **Eliana Carranza,** World Bank **Neil Rankin**, University of Stellenbosch We study the effect of alleviating information frictions on firm outcomes using a matching platform. We work with a large job placement agency that focuses on the market for entry-level low-skilled service jobs. They have developed and are currently piloting a matching platform that allows firms to post vacancies and receive shortlists of algorithmically matched workseekers who are interested in the specific vacancy and can be easily contacted. We will randomise access to the platform at the branch level for 750 urban branches of multiple large firms the Retail and Hospitality sector in South Africa. This intervention can affect branch outcomes through two mechanisms: reducing job posting costs and improving screening technology, which can improve match quality. We measure the effects of the intervention on branches' hiring decisions (who gets interviewed and hired), time to fill vacancies, cost of filling vacancies, and labour productivity (proxied by earnings, retention, and performance evaluations). We then measure downstream effects on branch outcomes: labour demand (total number of hires), revenue, and profit. We will collect data from monthly surveys of branch managers and workers and from real-time platform use. The value of the intervention depends on the matching algorithm's accuracy and the platform's ease of use. Both the algorithm and platform have been developed by the Harambee Youth Employment Accelerator. Harambee is a social enterprise that provides recruitment and placement services to 450 South African firms and has placed roughly 50,000 workseekers over seven years. Harambee has placed more than 100 workers in 16 branches in a pilot with a major client and plans to scale to many more clients in 2019. The intervention builds on Harambee expertise in skills assessment and placement and unique data. The matching algorithm uses data on vacancy requirements and on workseeker attributes relevant for the service sector such as spoken English proficiency, reliability, tolerance of long and unpredictable work hours, and access to (public) transport. We contribute to the literature on alleviating information frictions in three way. First, we analyse the effect of information frictions on the full recruitment and production process, from job posting to hiring, production, and retention. Second, we separate employment creation effects, in which firms hire more people when they frictions are removed, from displacement effects, in which better information shifts which workseekers access a fixed number of jobs. Third, we use algorithmic matching to mitigate the role of firm biases.

04:10 PM – 05:00 PM

Biased beliefs and entry into scientific careers

Ina Ganguli, University of Massachusetts
Patrick Gaule, University of Bath*
Danijela Vuletic, CERGE-EI

Educational choices are based on beliefs about subsequent career outcomes but these beliefs may be incorrect. We investigate this possibility and its consequences among a sample of U.S. STEM doctoral students using a novel survey combined with a field experiment. STEM doctoral students often enter graduate programs with the aspiration of becoming faculty members in research-intensive universities. However, in chemistry - the focus of this study - fewer than 10% of chemistry PhD graduates ever become tenure-track faculty in U.S. research-intensive universities. We first document that chemistry graduate students are excessively optimistic about the state of the academic market. When we ask respondents to state their beliefs about the share of peers from their program eventually obtaining a tenure-track position in a US research-intensive university, only a third of respondents have beliefs in the correct range. The remaining respondents tend to report higher beliefs, with an equal share mildly and widely overstating the true likelihood. Being overly optimistic in turn correlates with stated preferences for doing a postdoc and academic careers more generally. Next, we conduct an intervention whereby we provided accurate information on historical placement records by institution to a random subset of respondents. In contrast to economics, U.S. chemistry departments rarely disclose job placement information. Combining information from dissertation abstracts with faculty directories, we calculated the share of PhD graduates who ever become faculty in U.S. research-intensive universities by doctoral program. A random subset of respondents to our baseline survey received an email with a link to a custom-built website providing this information. We verify that the website was visited after respondents received the email through web analytics. We are now investigating the impact of the intervention on individual career aspirations and outcomes through a follow-up survey one year later, as well as through publicly available information on current affiliations. (Very) preliminary results suggest that the intervention did not impact beliefs about the academic market, although we observe marginally significant effects on the likelihood of doing a postdoc and satisfaction with choosing the PhD as a career path. This research may shed light on the apparent puzzle that there has been no decrease in demand for STEM graduate education and postdoctoral training, despite dwindling career prospects in the academic sector. Our results suggest that not only do individuals often have incorrect beliefs about the academic market but they also fail to update them when presented with information.

05:00 PM

Drinks reception