

Research Statement

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Previous work

I obtained my PhD in Economics at Utrecht University in March 2018, and hence, most of my previous scholarly work has been carried out in the four years as a PhD candidate before. Some of my work, however, dates back to jobs as an entrepreneurship researcher earlier on in my professional career.

Starting with the latter, at EIM business and policy research, I have mainly focused on studying solo self-employment. Over the years, I developed a panel with thousands of Dutch solo self-employed. One particular study using these data examines the relationship between start-up motive and firm performance [R&R *Small Business Economics*]. We find that necessity-driven solo self-employed perform significantly worse, no matter how we distinguish them from opportunity-driven solo self-employed, and even after controlling for firm age as a proxy for experiential learning.

At the Netherlands Organization for Applied Scientific Research (TNO), I continued doing research on self-employment, this time mostly related to their working conditions. I also started to investigate the topic of intrapreneurship, which led to publications in two leading Dutch journals. One of them compared intrapreneurs to other employees (i.a., more often male and highly educated), the other highlighted organizational factors that stimulate intrapreneurial behavior (i.a., providing resources and time).

For my dissertation, I combined newly available data from the Global Entrepreneurship Monitor (GEM) with data on countries' institutions and economic performance (i.a., from the OECD, World Bank, and GLOBE) in order to identify key institutional determinants and the economic consequences of both entrepreneurship and intrapreneurship. In brief, I find that the informal and formal institutional context channels individuals into different types of entrepreneurial activity, which, in turn, leads to different economic growth patterns.

One of its chapters connects a number of societal cultural practices with individuals' involvement in either entrepreneurship or intrapreneurship [to be submitted to the *Journal of Business Venturing*]. Countries with uncertainty-avoidant and institutional collectivistic cultures seem to compensate their relative lack of entrepreneurship by fostering intrapreneurship instead. Another chapter focuses on national-level employment protection legislation and its effects on individuals' occupational status [conditionally accepted for publication in the *International Small Business Journal*]. The notice period for employers is found to be negatively related to self-employment, but positively related to entrepreneurial employee activity. Yet another chapter examines the impact of different types of entrepreneurial activity on countries' economic performance [to be submitted to the *International Review of Entrepreneurship*]. Both entrepreneurship and intrapreneurship appear to enhance labor productivity growth, but their exact contributions differ depending on the extent to which the prevailing institutions support economic freedom.

Work in progress

After obtaining my PhD degree, I have been working on setting up two new research lines (without neglecting my previous research, that is). My work in progress can be roughly subdivided into (1) a multi-site replication endeavor in entrepreneurship, and (2) research on decision making in entrepreneurial contexts.

First, despite a few recent praiseworthy initiatives, the number of replication studies in the field of entrepreneurship remains far too limited. Because I consider replication of previous scientific work extremely important for knowledge accumulation and scientific discovery, I plan to build a consortium of research teams worldwide that each will replicate seminal work on the entrepreneurial orientation – firm performance relationship. Collaborating teams, coming from institutionally different countries, will apply the methodological protocol of the original study to data obtained from a new sample. Hence, this part of the endeavor will reveal the extent of *empirical generalization*. A subsequent moderated meta-analysis will

determine the boundary conditions under which an EO is most conducive to firm performance, and is denoted the *empirical extension* part of the endeavor.

Our all-encompassing replication plan got approved by the *Journal of Business Venturing Insights*, and has already been preregistered via the Open Science Framework (OSF). All replication studies strictly following the plan will be subject to a light version of the usual R&R cycle, as the only threshold is sufficient methodological rigor. Accepted studies will be published in JBVI's Virtual Special Issue on replication. A paper concerning the moderated meta-analysis will be targeted at the *Journal of Business Venturing*.

Second, in a conceptual paper, me and my co-authors provide a detailed introduction to an emerging data science domain – that is, social signal processing (SSP) – and demonstrate how it can advance research on decision making in entrepreneurial contexts [R&R *Small Business Economics*]. We both consider decisions made by entrepreneurs, and decisions made by others yet affecting entrepreneurs. We know that certain decisions are strongly influenced by nonverbal behavior during human interactions. Behavioral cues stemming from gestures, posture, and facial and vocal expressions can now be detected and analyzed by modern technologies utilizing artificial intelligence. We contend that SSP techniques are more efficient and more accurate than conventional research methods, and may reveal important factors that so far have been omitted in explaining decisions that are vital for firm survival and growth.

As a proof of concept, I have been recording entrepreneurial pitches, in which nascent entrepreneurs try to convey their business ideas to a number of investors. Funding decisions are partly based on the what is being said (e.g., about the team and product/service) and done (e.g., style of delivery) during a pitch. Coachability, preparedness, and entrepreneurial passion are well-established concepts in the extant literature, but usually just reflect others' perceptions using subjective measurements. Output of this research line will fit in seamlessly with ongoing debates in journals like the *Academy of Management Journal*, *Entrepreneurship Theory and Practice*, and the *Journal of Business Venturing*. Likewise, analyzing footage of board meetings and job interviews can also reveal decisive behavioral cues, which would advance research on strategic management and human resource management, respectively.

Future research goals

With my research, I aim to find answers to a variety of questions, but the following broadly formulated research question reflects my principal interest:

How can individuals be channeled into directions of entrepreneurial activity that are most productive to themselves, the organization(s) that they belong to (if any), and/or the society at large?

Here, *productive* may refer to happiness, job satisfaction, and wage income/profits at the individual level, to (growth of) sales or profits at the firm level, and to macroeconomic growth – for example, in terms of employment levels or labor productivity – at the country level. Entrepreneurial activity can take the form of entrepreneurship and intrapreneurship. In turn, one may distinguish between productive, unproductive and destructive forms of entrepreneurial activity, in line with the legacy of the late William Baumol.

Given that I now belong to the entrepreneurship group of a data science institute, my future research will increasingly combine the two disciplines. This can be interpreted in the following two ways:

- (1) Applying data science methods and techniques – for example, machine learning and text mining – to better address conventional entrepreneurship research questions
- (2) Investigating how data enable entrepreneurs in becoming (even more) successful

In addition to the aforementioned substantive research goals, I have the personal ambition to become a well-known expert and respected scholar in the field of entrepreneurship research. I hereby aim to bridge the gap between science and business (1) by getting inspired by questions from “the field”, and (2) by sharing implications and recommendations for business and government policy more clearly. To the same end, I am currently editing a practical textbook that is provisionally titled *Data Science for Entrepreneurship* [forthcoming *Springer Science+Business Media*].