

# Surveying Entrepreneurs' Perception of Society in Times of Corona: A proposal

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In this short paper, we propose a research design for collecting data on entrepreneurs' perceptions of the existential crisis. In particular, we are interested in a deeper understanding of the societal impact the Corona-Crisis will have on social relations in Germany through the eyes of a key-demographic: entrepreneurs. We outline a possible set up for a probabilistic web-panel of entrepreneurs, focusing on managing directors and company owners in small and medium sized companies. The panel would include questions about how entrepreneurs perceive the support offered by the government and the wider society, how this evaluation will impact their view of the government and their fellow citizens and how entrepreneurs see any chance in this crisis for more sustainability-oriented business practices. Moreover, we outline a sampling strategy and a data collection mode. Such research is of particular relevance in the current situation of high uncertainty to better understand how perceptions and attitudes of entrepreneurs are developing due to the crisis. This will not only have important implications for the social group under study, but for questions about the social cohesion more generally.

*Keywords:* COVID-19;Entrepreneurs;Organizational Survey;Determinants of institutional trust;economic relief measures

## 1 Introduction

In this paper we present the idea of collecting data on how the current pandemic crisis is influencing societal cohesion and trust in politics and the government. To investigate this topic, we focus on one relevant societal group: entrepreneurs. Many companies face an existential crisis due to Corona-pandemic related societal measures: either in re-organizing their business activities (at least in the short term) or most radically, in facing bankruptcy. Against this backdrop, we wish to collect insights into the ways this existential situation is influencing how entrepreneurs perceive the crisis. In particular, we are interested in (1) whether they perceive the support offered by the government and wider society as fair and sufficient, (2), how this evaluation impacts their view of the government and their fellow citizens (e.g. Chanley, Rudolph, & Rahn, 2000; Tyler, 1994), and (3), how entrepreneurs see a link between societal support, chances for more sustainability-oriented business practices (Spies-Butcher & Stebbing, 2016; Whiteman, Walker, & Perego, 2013) or how the current situation might be conducive to their entrepreneurial activities, e.g., product, service or pro-

cess innovation (Schumpeter, 1942). We argue that all these together will be decisive for their future trust in politics and the government, and their trust in wider societal and political institutions (e.g. Hetherington, 1998). Moreover, this will also have important implications for better understanding the societal threats and changes this crisis is creating in more general terms, as entrepreneurs represent one key societal group. Towards this aim, the intention is to set up a probabilistic web-panel of entrepreneurs, focusing on managing directors and company owners in small- and medium-sized companies. We aim to collect three waves of data in the second half of 2020, tracking attitudes towards the societal response to the pandemic as well as changes in these attitudes over time. The nature of the particular research design requires that data collection starts as soon as possible. Entrepreneurs' perceptions of their current situation should be measured while sentiments are fresh, tracking developments with several data collection phases. In addition, the necessity for a second lockdown is still, unfortunately, a real possibility in the second half of 2020, and if it is needed, the proposed study would be well suited to track its impact directly from the beginning and possibly to the end.

## 2 Preparations and Questionnaire Design

Our outline of the intended content contains several subject areas: a) basic information: industry, number of employees, different financial performance measures, b) economic

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impact of the crisis: e.g. projected loss in revenue, current financial status, likelihood of insolvency by the end of the year, likelihood of lay-offs, preparedness for a second wave of the pandemic, whether state support has been applied for (and which program), whether it has been received, amount of support, ease and fairness of application process, conditionality of state support on sustainability related measures in business operations, recent product, service or process innovation and related expenditures, potential impact of the recent changes on economic success and/or business sustainability, c) societal impact: evaluation of respondent's support received by different groups - government, banks, customers, business partners, general public; trust in government, institutions and fellow citizens; anti-establishment tendencies, political apathy, view on the future of business and society and the crisis' impact on business sustainability. Due to the project's urgency, we will rely wherever possible on existing, tried and tested questions and measurements from well-established surveys, such as the GSOEP, ESS, the IAB Establishment Panel, the Mannheim Innovation Panel and ifo enterprise surveys. There have also been a range of high-quality, fast response attempts to collect data throughout the crisis, such as the German Internet Panel, the GESIS Panel or SOEP-CoV, which will be screened for relevant measures to include in our survey. This will allow us to compare entrepreneurs' attitudes to attitudes in the general population during the crisis.

### 3 Sampling and Data Collection

The main sample will be a probability sample of entrepreneurs in Germany, defined for our purposes as managing directors and company owners in small- and medium-sized enterprises (SMEs). We focus on these, as their personal involvement and affective attachment is likely to be much higher than for employed managers and executives in larger companies. Therefore, they are more likely to be affected personally in their values and attitudes (Berrone, Cruz, & Gomez-Mejia, 2012). In addition, state support measures differ greatly between smaller and larger companies. Due to their size and importance, larger companies have greater negotiating power and may rely on additional support measures such as public credits and bail-out funding that are specifically tailored to them. SMEs, by contrast, are limited to the generic and rule-based measures offered to them, a fact that may cause further grievances. Overall, SMEs are most relevant to our research question, theoretically but also practically, as they make up the vast majority of German enterprises.

In addition to this overall sample, we aim to survey the entirety of all enterprises who declared insolvency this year, as evidenced by a public insolvency announcement in the German company register (available under [www.handelsregister.de](http://www.handelsregister.de)); in 2019, there were about 19,000

insolvencies in Germany (DESTATIS, 2020). Those enterprises are of particular interest for the research question, as they already face an existential crisis, potentially due to the Corona-crisis. However, without a comparison to the wider population of entrepreneurs, surveying them alone would result in selection on the dependent variable without the possibility to draw any valid conclusion.

To draw the sample and obtain the necessary contact information, we plan to acquire a license for the commercial Orbis business database (provided by the publisher of business information Bureau van Dijk), a comprehensive source comprising all publicly registered German companies stretching back several years, even including insolvent companies. The database is a combination of publicly available information from registers and direct inquiries from the companies by the commercial data providers. It contains all the information necessary to serve as a sampling frame, including contact information on managing directors and company owners, who serve as the primary target for our survey. Additional information entails industry, number of employees, key financial indicators and economic history. It will also allow for the calculation of post-stratification weights on key characteristics for the completed sample. The database of enterprises, (which comes close to a census of all enterprises in existence in Germany), will allow us to further investigate bias in the sample (Fulton, 2018) and to devise a weighting scheme in order to adjust for non-response and to get closer to unbiased estimates, at least based on known and observed characteristics.

The probability sample will be based on a two-step procedure, whereby we first randomly select SMEs with a probability proportional to size (i.e., the number of owners and managers in the company) in order to assure equal sampling probabilities on the individual level. Here, all the managing directors (*eingetragene Geschäftsführer*) and owners (*Gesellschafter*) of selected enterprises will be included in the sample. As is common practice (Meyer, 2011; Mueller & Spitz-Oener, 2006), we plan to stratify the sample according to key variables such as region and industry where available, in order to avoid missing important subgroups and to increase statistical efficiency. Depending on the findings in the preparation stage, we will consider oversampling enterprises from industries put under especial strain by the crisis, such as gastronomy and tourism. This will allow detailed subgroup analyses to be made separately later on.

As is standard practice, we will use response enhancing measures such as advance letters, personalization, and non-response follow-up letters wherever possible during the fieldwork (c.f. Dillman, 2007). However, response probabilities in business surveys are usually low. In a meta-study, Cycyota and Harrison (2006) report a mean response rate of 34 % among top level executives. Response rates are likely to have diminished since, especially for Germany, where they

are traditionally low. The current pandemic might reduce response propensities to the survey request further. As most enterprises are currently experiencing more strain than usual, this may limit managers' and owners' personal and organizational capacities to respond to a survey. In regard to insolvent companies, the question remains whether owners and managers still can be contacted and whether they would be willing to answer questions about their insolvency (c.f. Krumpal, 2013). However, we expect the salience of the topic to boost responses, as it directly addresses entrepreneurs' concerns and invites them to express their grievances (c.f. Anseel, Lievens, Schollaert, & Choragwicka, 2010).

We aim to survey entrepreneurs on three different occasions, effectively setting up a panel study, which will allow us to track changes in attitudes not only in the aggregate, but also at the individual level. For the first round of the general entrepreneur sample, we plan to draw a gross sample of 30,000 individuals and aim for a cautious response rate of five percent of eligible individuals. This will result in roughly 1,500 completed interviews in wave one of the study. After panel attrition, this will go on to result in 1,000 cases in wave two, and 750 cases in wave three (assuming a panel attrition rate of 35 % and 25 % respectively). We will also continue to recruit new cases throughout the project according to necessity, to boost sample size and combat panel attrition.

While the main mode will be a web survey, we plan to complement the web survey with paper and pencil mail questionnaires posted to potential participants. While the web survey will have priority, as recruitment and response turnover will be much quicker and overall administration will be less costly, there are good reasons to use self-administered paper questionnaires mailed to respondents as well. First, the database will not provide suitable email addresses for all target persons. Second, not all entrepreneurs will be available or willing to respond to a web survey, possibly introducing bias into the sample. Third, there may be unrecognized mode effects caused by using a web survey only. Fourth, it may well be that response to a mail survey is higher than to a web survey. Thus, a complementary mail survey will help to increase response for people where no direct email address is available (and may potentially be used for non-respondents after the first contact attempt). In addition, we will also assign the paper questionnaire to a random subsample and will therefore be able to detect differences between the two modes, which in turn will give us an indication where the data might be biased - information that will guide us in the interpretation of results. While the size of the mail survey will be small compared to the main sample, it will allow us to adjust the overall survey design of later waves of the study if deemed necessary.

#### **4 Implementation, Fieldwork, Schedule and Outlook**

We are currently applying for funding for the project. Hence, for the time being, the timeline provided is conditional on funding decisions, but we hope to start preparations as soon as possible, collecting input from experts in the field and stakeholders representing the view of entrepreneurs. The rules and principles of proper research data management and data protection will be applied and adhered to throughout the project, aiming to publish the data soon after fieldwork has ended. We will also set up a website and devise information material to help target respondents find information on the project.

The work schedule needs to balance the necessity to act quickly in order to capture the current events while they are still unfolding with the quality requirements of proper survey research. These include a proper preparation phase for questionnaire design and pretesting, which requires time in itself. In the following, we offer a timeline that should allow us a reasonable trade-off between the two demands, but we will do whatever we can to field the survey earlier if possible. It should be noted, however, that for some aspects of the project timing might be less relevant than for others. For example, the information about what kind of state support was applied for (and received) is a factual question that should enable accurate estimates even when asked retrospectively. Attitudinal questions, on the other hand, do not work well retrospectively. As we are interested in long-term attitudinal change (e.g., of trust in government), however, we also find it acceptable for data collection to take place during the second half of 2020.

A quantitative pretest is planned for the beginning of July, once the programming of the draft questionnaire in an online survey-tool (e.g., Limesurvey) has been completed. Start of data collection is envisaged for the beginning of August, with advance letters being sent out to target persons, including the invitation and a link to the online survey (or the full paper questionnaire for the mail survey recipients, respectively). Here, we will rely on contact data from the commercial database, which provides physical and/or email addresses of target persons. This phase will involve intensive fieldwork management, tracking and controlling responses, sending out reminder letters, and managing requests and feedback from respondents. On the project's website, we plan to publish preliminary findings after each wave for interested respondents and the wider public. We think it is of particular relevance in the current situation of high uncertainty to know early on how the perceptions and attitudes of entrepreneurs are developing due to the crisis.

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### Commentary

It was a pleasure to review the paper. We found it very interesting, especially because it touches upon the relevant issue of entrepreneurship during the current pandemic crisis. Actually, if we go back to the pioneering works by Schumpeter on entrepreneurship and innovation, we can see that the context of crises is the most conducive for entrepreneurial activities. Therefore, one might say that this is definitely a timely topic for research. Nevertheless, some aspects of your paper can certainly be improved. Please, find below our main comments:

1. The first question relates to the focus on SMEs. If your database allows you to have access to all companies in Germany, why would you not collect data to large companies as well? One potentially interesting finding could be that, despite the disadvantages in financial issues, SMEs are more flexible to adaptations during this crisis, for example. It seems a loss of relevant information not taking large firms into account.
2. Following the lead of the Schumpeterian theory again, it could be that one of the main phenomena to study among firms during the Corona-crisis is precisely technological change and adaptation. You currently do not incorporate such question in your framework. At most, it could be said that this is something that might be explored on question three (3 – how entrepreneurs see any chance in this crisis for more sustainability-oriented business practices), but we would argue that it actually deserves a specific research question due to its centrality in crisis theories, such as the one on business cycles.
3. In the same vein, it could be important to include some surveys on technological innovation to be screened in the process of questionnaire design. The Community Innovation Survey and the Mannheim Innovation Panel are perhaps the most relevant examples for Germany. They could inspire you for including some questions related to technological change.
4. As regards the sampling design, we would recommend to implement some stratification process since the beginning and not to rely only on post-stratification weights. The results could be substantially driven by sampling error if particular subgroups (industries, regions, sizes) would not be considered as strata.

5. Relatedly, as the author(s) are able to rely on a probability sample, we would recommend to calculate the sampling design effects and provide them to the readers with the results.
6. The authors comment on the already diagnosed low rates of responses in business surveys. It could be interesting to discuss briefly implications of the Covid-19 pandemic to this aspect, as well as presenting strategies to cope with the problem if they still receive a few answers in this survey even after using mail questionnaires.
7. We found the timeline proposed quite worrisome, as the pretest will only be applied in July. In the best scenario, the first wave should be applied while the pandemic is still at its highest point. Therefore, we would recommend to begin earlier, if possible.

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