Motivating businesses to respond in a voluntary survey on investments in intangible assets

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# Introduction

Investment in intangible assets (IA) is nowadays considered an important source of productivity and growth. Estimates, based on the definition by Corrado *et al.* [1] show that the intangible investment accounts between 6 and 13% of GDP, depending on country and year [2, 3, 4]. However, studies on the role of IA are still in their infancy because of the lack of appropriate data sources, among others. Only a handful of surveys have been conducted to this date to collect data directly from the most knowledgeable about these investments, the businesses. The last of these pioneer attempts happened back in 2013.

The Horizon2020 Globalinto project (funded by the European Union under grant agreement No 822259; see <https://www.globalinto.eu/>) aims at filling this gap by conducting a survey on intangibles in seven countries (Denmark, Finland, France, Germany, Greece, Slovenia, and the UK). It should also represent an important step towards integrating this topic in the official statistics systems. The survey will cover a broad range of intangible investments in line with Corrado *et al.* [1], thus not only R&D but also business process/organisation improvement, staff training, software, databases, design, reputation, and branding. In addition to this core part, the survey will also inquire into factors influencing these investments, the impact of intangibles on firm performance as well as the impact of typical policy measures and the COVID-19 pandemic.

From methodological perspective, two survey characteristics are especially important: the survey is voluntary, and the most knowledgeable respondent is expected to be a top executive. Non-response is critically high in non-mandatory business surveys and even more of a challenge when surveying top executives. Baruch and Holtom [5] calculated an average response rate of 35.7% for 117 studies published in 2000 and 2005 in 17 refereed academic journals utilising data collected from organisations. Cycyota and Harrison [6] arrived at an average response rate of 34% for executives based on 231 studies in nine top-ranked journals widely cited in management over the period from 1992 to 2003. Their meta-analysis showed that only three techniques worked with this target group:

* topic salience, which requires thoughtful communication of the topic to appeal to the interest, relevance, timeliness and effectiveness of executives;
* consent pre-screening; and
* social networks, as executives seem more attentive and responsive to requests that draw on existing social ties and relationships, including personal and professional contacts.

These findings are in line with the meta-analysis by Anseel *et al.* [7] covering 2,037 surveys in 12 journals in I/O Psychology, Management, and Marketing during the period 1995-2008. Among typical response enhancing techniques (e.g. advance notice, follow-up, incentives, personalisation, topic salience, university sponsorship, mode etc.), only topic salience was found to have a positive effect on response rates among top executives, while incentives had a negative one.

In the last decade, the situation has become even worse for survey research but some topics like intangibles do not have a good alternative source to turn to so voluntary business surveys remain an important method of business data collection. However, techniques shown to work at the beginning of the century might have lost their edge. As the topic is a given, other techniques warrant attention. Our study will try to answer two research questions:

* What are general response patterns across countries involved in the survey on intangibles?
* Can social networks help improve the response?

# Methods

The COVID-19 pandemic prevented the initial plans for survey implementation in early 2020 and postponed it to late 2020 but other survey characteristics have not changed.

## Survey characteristics

A specialized international commercial agency will collect data on behalf of research partners using a telephone interview (CATI). Contacts from commercial databases will be used to establish contact and schedule the interview. A pdf version of the questionnaire will be available upon request. The target respondent is the CEO or another top-level manager, including the financial director. The interview is estimated to take less than half an hour.

The target population consists of high-tech, knowledge-intensive and IA-intensive manufacturing and service activities with at least 20 but preferably 50 employees (for the group of larger countries where this threshold is feasible).

A number of measures have been taken to ensure survey participation:

* Questions have been reviewed by different experts and tested with businesses in two countries.
* Design principles have been applied to the pdf version of the questionnaire.
* A motivation letter has been designed to appeal to executives.
* A small pilot is foreseen to test the questionnaire and overall survey procedures.
* The interviewers must have sufficient experience in similar survey tasks and go through rigorous training.
* Up to ten contact attempts are foreseen before discarding a unit as non-response, and even more attempts are possible for call-back appointments.
* Real-time tracking of the field work offers rich paradata to tailor data collection if needed.
* About a tenth of all interviews is foreseen for quality control procedures.

## Experiment in Slovenia

In Slovenia, an experiment will be embedded in the survey design to test the effectiveness of a recruiting strategy that relies on social networks as suggested by Cycyota and Harrison. For half of the sample, names of targeted respondents will be sought in advance of data collection and checked for connections within the university. The most connected people within the university will act as ambassadors for the survey, underscoring the topic relevance. The experiment will test the hypothesis that having ambassadors underscore the topic relevance will result in a positive effect on survey participation, albeit with a high cost per unit.

# Conclusions

Data on intangibles are of high interest to economist as they promise to bring new insights for policy and business decision making. In this specific moment in time with COVID-19 epidemic in full swing, intangibles might turn out to offer resilience and flexibility to businesses, which makes data on intangibles even more valuable. Voluntary business surveys as a method of data collection are being challenged because of high non-response. This research should shed some light on response enhancing techniques worth pursuing.

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