

Impacts of the COVID-19 Pandemic on Labor Market Surveys at the German Institute for Employment Research

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The COVID-19 pandemic and associated government lockdown restrictions have fueled a high demand for survey data on how individuals and establishments are coping with the restrictions. However, the pandemic has also dramatically affected surveys themselves, forcing research institutes to adapt their fieldwork operations to the uncertain and evolving conditions. This paper documents the specific impacts of the pandemic on several ongoing surveys at the Institute for Employment Research in Germany, and describes how these impacts have been addressed. In addition, this paper summarizes efforts to rapidly develop new COVID-19 surveys to help meet the increasing demand for timely data about the effects of the Corona-Crisis on the labor market.

Keywords: COVID-19; survey operations; data collection; establishment surveys; panel surveys

1 Introduction

This contribution disseminates knowledge about the profound impacts of the COVID-19 pandemic and government lockdown restrictions on several ongoing surveys at the Institute for Employment Research (IAB) in Germany,¹ and the IAB's responses to these challenges. The IAB is an interdisciplinary research institution of the Federal Employment Agency (BA) based in Nuremberg, which conducts empirical and evaluative labor market research that informs political discussions and policy development in Germany. Much of IAB research is based on primary data collection from ongoing, voluntary surveys conducted on a wide range of study populations, including welfare recipients, unemployed persons, job seekers, refugees/migrants, public and private establishments, and the general household population. IAB survey data are made available to the research community through the Research Data Center (RDC)² in Nuremberg and several international RDC sites located in Europe and North America.³

2 Risk Assessment

The COVID-19 pandemic affected many aspects of IAB survey operations, including questionnaire development, data collection mode(s), sampling, fieldwork, and quality control processes. The effects varied across surveys as the surveys' operations were in different phases of the survey lifecycle when the lockdown orders took effect. To take stock of the situation, each survey team prepared a comprehensive risk assessment documenting the consequences of the pandemic on survey operations and resulting data quality, and possible solutions and contingency plans. The IAB also recognized the demand for prompt data on how the Corona-Crisis was affecting individuals and establishments in the labor market. This resulted in the modification of ongoing surveys and the development of new surveys to collect COVID-19 information. The following summarizes the effects of the pandemic on a selection of IAB surveys, how these effects are being addressed, and the development of new COVID-19 surveys.

3 Impacts on Ongoing Surveys

IAB Job Vacancy Survey (JVS)

The JVS⁴ is a quarterly establishment survey that quantifies the unfilled labor demand and other worker flows in Ger-

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¹<https://www.iab.de>

²<https://fdz.iab.de/en.aspx>

³https://fdz.iab.de/en/FDZ_Data_Access/FDZ_On-Site_Use/Standorte.aspx

⁴<https://www.iab.de/en/befragungen/stellenangebot.aspx>

many. In the 4th quarter of every year, paper questionnaires (with an optional web survey link) are mailed to a cross-sectional sample of roughly 110,000 establishments drawn from the BA establishment register. Respondents are briefly re-interviewed in the 1st, 2nd, and 3rd quarters via telephone to update the number of vacancies and other information. With the start of the 2nd quarter approaching, the JVS risk assessment revealed three challenges. First, the health and safety of the survey institute's interviewer staff was a chief concern. Possible infection among the staff risked shutting down the telephone lab and halting data collection. To prepare for this possibility, a backup web survey was developed. Fortunately, as of 15th May 2020, telephone interviewing has proceeded without complication and without the need for online data collection.

The second anticipated challenge was reduced response rates. Establishments in Germany have changed dramatically since the lockdown measures began in mid-March and gradually intensified until the end-of-March. Some establishments have been forced to close temporarily by law or due to the general impact of the Corona-Crisis. Other establishments changed their organization of work with many employees working from home and/or on shorter working times (*short-time work* or *Kurzarbeit*) subsidized by the federal government (Federal Ministry of Labour and Social Affairs, 2020). Thus, establishments may minimize non-essential tasks, such as completing voluntary surveys, to stay solvent. To ensure the precision of survey estimates required by key stakeholders (e.g. Eurostat), the 2nd quarter sample was enlarged by including a supplementary sample of establishments that participated in the 4th quarter of 2019 as part of a separate methodological JVS survey. Moreover, a larger cross-sectional sample is planned for the 4th quarter of 2020.

The third identified challenge was the growing demand for up-to-date data on establishments and job vacancies in Germany. The JVS team identified a need to collect data on how establishments were reacting to the current crisis and to release this information quickly. Accordingly, the 2nd quarter questionnaire was modified to include items on subsidized short-time work, layoffs, and risks of closure. These items are also planned to be collected in the upcoming quarters of 2020. Intermediate datasets will be extracted for analysis after the first-half of the 2nd quarter field period is completed. Re-interviews with the current cohort will likely be extended until the 2nd quarter of 2021. The advantage of the longer observation period is that this cohort was recruited in Fall 2019, several months prior to the start of the lockdown measures, allowing for the before-and-after effects of the restrictions to be analyzed.

IAB Establishment Panel (EP)

The EP⁵ is an annual longitudinal establishment survey that collects objective operational characteristics and subjective

assessments from about 16,000 establishments. Each year, interviews are conducted with panel establishments and a newly-drawn refreshment sample of establishments. Until 2017, the EP had been conducted via face-to-face mode (with paper-based self-completion upon request). Starting in 2018, a web mode was introduced experimentally as part of a sequential mixed-mode design, which continued in 2019. Given the high transmissibility of SARS-CoV-2 and the enforced lockdown restrictions, it was quickly determined that face-to-face interviewing would be infeasible. However, postponing the survey until next year was not an option as data on establishments during the pandemic are of paramount interest to the survey's stakeholders. Moreover, the 2020 refreshment cohort is expected to garner high interest going forward in the panel.

Thus, an alternative data collection strategy was developed with fieldwork planned for June-October 2020. As with the JVS, response rate concerns were raised with the EP. For this reason, a fully self-administered survey was ruled out in favor of a sequential mixed-mode design involving web, paper, and a newly-introduced telephone mode. Panel and refreshment cases will first receive an invitation to take part in the web survey. After some weeks, nonrespondents will be sent a paper questionnaire with return envelope, followed by telephone contacts for the remaining nonrespondents. The aim of introducing the telephone mode is to minimize the risk of establishments refusing to participate because of discomfort with self-completion or discontinuity with a familiar interviewer known from previous face-to-face interviews, avoiding a larger-than-anticipated drop in the response rate.

However, introducing the telephone mode for a single wave poses two key challenges. First, interviews will be conducted from the interviewers' private telephones. This requires additional training and more intensive quality control procedures. Accordingly, interviewers will enter all interview data directly into a computer-assisted personal interviewing (CAPI) device to ensure relevant paradata (e.g. timestamps) are recorded. Additionally, a greater proportion of respondents will be re-contacted by the survey institute for interview verification. The second challenge is quantifying mode effects. It is well known that mixing self- and interviewer-administered modes has the potential to introduce differential selection and measurement errors and should only be done with caution (e.g. Klausch, Hox, & Schouten, 2013). To understand potential mode effects, an experiment (similar to the 2018 wave) will be conducted by randomly assigning refreshment cases to single-mode (telephone-only) and sequential mixed-mode (web-mail-telephone) groups. This design will facilitate the study of mode effects in the 2020 wave and in follow-up waves when face-to-face interviewing is expected to return.

⁵<https://www.iab.de/en/erhebungen/iab-betriebspanel.aspx>

Quality of Life and Social Participation (QLSP)

The QLSP⁶ is a new panel survey designed to evaluate two new employment subsidy programs introduced in 2019 in Germany for the long-term unemployed and long-term benefit recipients (N~16,000). Up to four waves (in 2020, 2021, 2023, and 2025) of telephone interviews will be conducted with program participants and a propensity-score matched control group. The key outcomes assess whether the programs meet their goals of improving participants' social integration and employability via employment in a subsidized job. Due to the pandemic, it became clear that these outcomes are likely to be substantively affected by the Corona-Crisis and the associated government restrictions. Thus, the start of wave 1 was postponed from March to May 2020 to revise the questionnaire.

During the pandemic and lockdown restrictions, some program participants may have been unable to work or worked fewer or more hours than usual. Thus, the treatment, employment in a subsidized job, does not take the form that was initially expected, and any effect on respondents' employability and social integration can be expected to be reduced or delayed. Therefore, the survey was adjusted to record changes in working hours and in earned income, as compared to the time before the pandemic, and whether the respondents were able to work from home. Further new items address respondents' fear of job loss, whether their working conditions have deteriorated due to the pandemic, and whether and when they were in quarantine or voluntary isolation. To account for additional heterogeneity, time series data on the pandemic and government responses (e.g. stay-at-home orders and closures) will be merged to respondents' survey records by interview date. The survey institute has taken additional steps to decrease the risk of infection in the telephone lab by splitting interviewers into work shifts, using more rooms, and seating interviewers further apart. Since fewer interviewers will work simultaneously, the length of the field period will be extended.

Labour Market and Social Security (PASS)

The PASS⁷ is an annual longitudinal mixed-mode (telephone and face-to-face) survey of approximately 10,000 households that focuses on capturing the effects of Unemployment Benefit II receipt on the social and economic situation of the recipient households. Fieldwork started on February 14th and was abruptly interrupted by the contact restrictions implemented in mid-March, resulting in a fast switch to telephone only. The mode-design switch has several impacts on the survey, including removal of restrictions on the limit of telephone interviews per interviewer, most interviewers working from home, and the necessity for more thorough quality control processes. Although interviewers with whom panel members are already familiar from previous face-to-

face interviews administer the telephone calls, a lower response rate is expected due to non-contact or refusal. In addition, new questionnaire items were introduced on April 8th regarding home isolation/quarantine, organization of child-care, potential loss of income, changes in the place of work, among others.

4 Development of New COVID-19 Surveys

IAB High-Frequency Online Personal Panel (HOPP)

The HOPP is a bi-monthly online panel that was rapidly developed by the IAB to evaluate how the pandemic is affecting individuals in the German labor market. With the first wave established in May 2020, a random sample of 200,000 individuals drawn from IAB register data were sent an invitation letter with login details and password. The HOPP collects data on labor market-related aspects of life, such as regular employment, subsidized short-time work, childcare, home office, benefit receipt, and life satisfaction. The HOPP has three primary aims: 1) to help researchers and politicians understand the short-term effects of the pandemic on people's lives and working situations; 2) to supplement and link with administrative process data of the BA to evaluate the long-term effects of the pandemic on the employment biographies of residents in Germany; and 3) to flexibly collect data on new topics as the Corona-Crisis evolves by allowing researchers to submit new questions. However, a key challenge will be to correct for sample selectivity and to keep individuals engaged in the panel. Incentive experiments are planned to maximize panel engagement, and rich administrative data will be used to assess and adjust for nonresponse bias. The questionnaire includes several items from other COVID-19 surveys, which will be used to further enhance the nonresponse adjustment strategy.

IAB-BAMF-SOEP COVID-19 Survey of Refugees (CSR)

The CSR is currently being developed as a telephone survey intended to capture the effects of the Corona-Crisis on refugees living in Germany. The survey (pending funding) will be administered to participants of the IAB-BAMF-SOEP COVID-19 Survey of Refugees,⁸ a longitudinal household survey of refugees who arrived in Germany between 2013 and 2016. The main survey will be fielded in August 2020 pending unforeseen delays. However, given the high demand for timely data on this vulnerable population, the cooperating institutions decided to carry out the CSR before the main survey. In addition to items about the physical and mental health

⁶<https://www.soko-institut.de/de/projekte/details/artikel/wissenschaftliche-befragung-lebensqualitaet-und-teilhabe-1/>

⁷https://fdz.iab.de/en/FDZ_Individual_Data/PASS.aspx

⁸https://fdz.iab.de/en/FDZ_Individual_Data/iab-bamf-soep/iab-bamf-soep-suf1617v1.aspx

of the respondent and household members, the CSR questionnaire includes items concerning changes to labor market participation and earnings, childcare, time use, social life, and wellbeing due to the lockdown measures. Respondents also receive questions related to changes in language course participation and participation in further educational activities. Since many questions are similar to those fielded in the core SOEP survey,⁹ a comparison between refugees and native-born or other immigrants can uncover potential inequalities or differences in the evaluation and handling of the crisis' impacts. Due to time constraints, the CSR faces significant challenges, including limited pre-testing of the questionnaire, which is only translated into Arabic, Farsi, and English instead of the usual seven languages. Hence, participation among refugees from countries with other national languages or limited German proficiency may be low. Non-response analyses will be performed using administrative data and previously-collected survey data.

5 Conclusions

The COVID-19 pandemic and associated government lockdown restrictions have had a significant and challenging impact on survey data collection around the world. This paper briefly detailed the specific impacts of the pandemic and government actions on several ongoing IAB labor market surveys, including anticipated reductions in participation among households and establishments, suspension of all face-to-face interviewing, and delayed or reduced treatment effects in evaluation research. In addition, this paper detailed how these impacts are being addressed through further questionnaire development, fast mode changes and experiments to assess potential mode effects, increased telephone interviewer controlling procedures, and timelier data extractions. Furthermore, this paper described the proactive steps taken by the IAB to collect new COVID-19-specific items in ongoing surveys and develop new COVID-19 surveys to better understand the effects of the pandemic and lockdown measures on the labor market and society in general. As we continue to learn how individuals, households, and establishments are coping with the pandemic and the gradual lifting of the government-imposed restrictions, the IAB data will serve as a useful and timely resource for policymakers and the research community.

References

Federal Ministry of Labour and Social Affairs. (2020). Questions and answers relating to short-time work (Kurzarbeit) and skills development. Retrieved from <https://www.bmas.de/SharedDocs/Downloads/DE/kug-faq-kurzarbeit-und-qualifizierung-englisch.pdf>

Klausch, T., Hox, J., & Schouten, B. (2013). Measurement effects of survey mode on the equivalence of attitudinal rating scale questions. *Sociological Methods & Research*, 42(3), 227–263.

Commentary

With their contribution “Impacts of the COVID-19 Pandemic on Labor Market Surveys at the German Institute for Employment Research”, Sakshaug et al. give an account of how the COVID-19 pandemic affected surveys at the Institute for Employment Research (IAB) in Germany. The authors provide information on four ongoing labor market surveys (IAB Job Vacancy Survey (JVS), IAB Establishment Panel (EP), Quality of Life and Social Participation (QLSP), Labour Market and Social Security (PASS)) and two newly created surveys. These two surveys are specifically targeted at studying the impact of COVID-19 on the labor market (IAB High-Frequency Online Personal Panel (HOPP), IAB-BAMF-SOEP COVID-19 Survey of Refugees (CSR)). Based on the six surveys, the authors describe how the impacts of COVID-19 were addressed by adjusting survey design, data quality controls, and questionnaire content.

For each of the surveys listed above, Sakshaug et al. detail changes with respect to COVID-19. This is especially so for ongoing surveys that were affected by the pandemic. Challenges are described and include decreasing response rates, disrupted workflow, health risks for interviewers, and delayed treatment effects. In response to these challenges, the authors list various measures that were implemented in each survey. These parts of the contribution are noteworthy as they not only highlight how survey design can be adjusted to cope with issues in the field but also, more importantly, how each measure was specifically designed for the requirements of the respective survey. For each survey, risks were assessed, and contingency plans were developed, resulting in fit-for-purpose responses to the expected impact of COVID-19.

As the present contribution covers six different surveys, descriptions are necessarily rather brief. In several instances, readers will wish for more details, such as how propensity score matching was applied in QLSP to create control groups or how exactly a more thorough quality control was implemented in PASS. However, this is beyond the scope of the present contribution and length as suggested by the journal. Besides, during the time of writing, the COVID-19 pandemic was still ongoing and its further development unknown. In addition, most of the implemented measures were a deviation from prior survey design (e.g., mode switches). Thus, extensive methodological follow-up research will be required to investigate the consequences of these deviations. For instance, it will be paramount to disentangle substantive effects

⁹<https://www.diw.de/en/soep>

(i.e., changes due to COVID-19) and methodological artifacts (i.e., effects of design changes and effects of COVID-19 on survey performance) in the data to allow for drawing unbiased conclusions in longitudinal analysis.

Consequently, revisiting the IAB surveys and investigating how COVID-19 affected survey outcomes in more detail will be a relevant task for the future. A follow-up publication might provide more detailed descriptions and an evaluation of how well the implemented measures performed. Sakshaug et al. provide a welcome and important addition to the literature. Accounts of how COVID-19 affected survey data collection will be essential to understand how survey research developed during this period. As the authors argued, governments and the research community rely on data collected during the pandemic to investigate its impacts on society. To evaluate the quality of these survey data, it will be crucial to understand the circumstances under which they were collected. Accounts such as the present provide the necessary context.

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