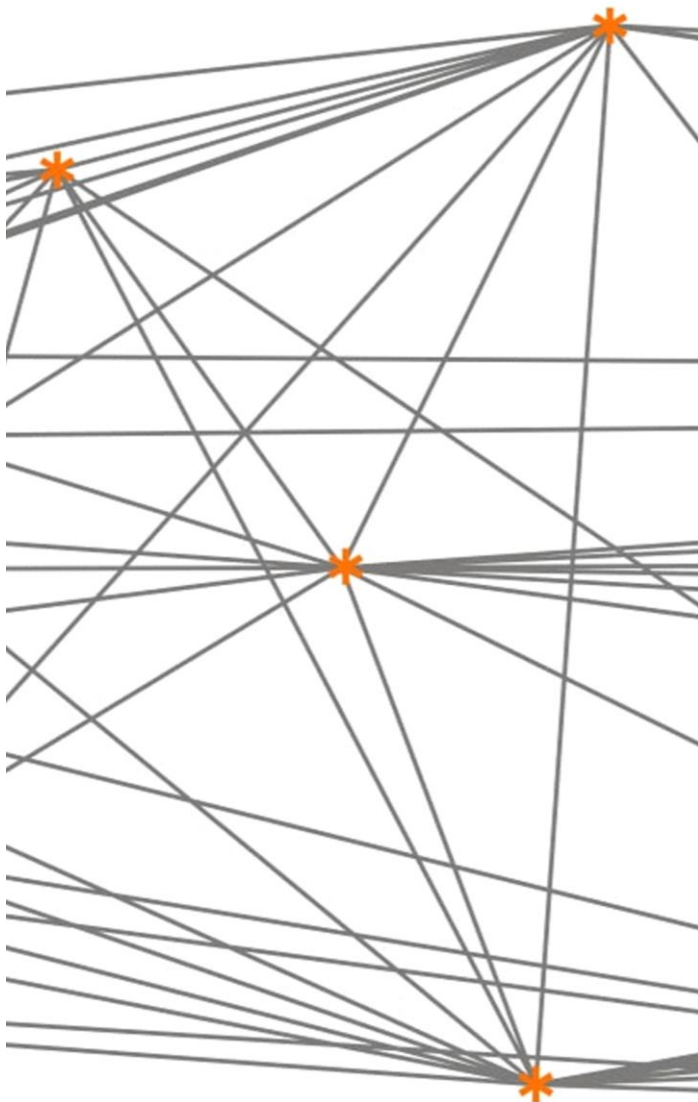




SHARE Corona Survey

Release 9.0.0



March 28, 2024

Table of Contents

- 1 About this release..... 3
- 2 New in this Release 3
- 3 About SHARE: General Overview 3
- 4 The SHARE Corona Survey..... 4
 - 4.1 Switch to telephone interviewing during the COVID-19-pandemic 4
 - 4.2 Content of the SHARE Corona data..... 4
 - 4.3 Sample and fieldwork design 5
 - 4.4 Participating countries 6
 - 4.5 Weights..... 7
 - 4.6 Imputations 8
 - 4.7 Data Access..... 13
 - 4.8 Citation Requirements 14

1 About this release

This release guide describes background and content of the SHARE Corona dataset containing data collected via computer-assisted telephone interviews (CATI) in the two rounds of the SHARE Corona Survey (SCS) between June and August 2020 (1st SCS) and one year later between June and August 2021 (2nd SCS). For further information on the regular SHARE CAPI data, please see [Release Guide 9.0.0](#).

2 New in Release 9.0.0

- Latest State of sample cleaning
- Updated imputations and weights

3 About SHARE: General Overview

The Survey of Health, Ageing and Retirement in Europe (SHARE) is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of individuals aged 50 or older. SHARE started in 2004 with representative samples of individuals aged 50+ in 11 European countries as a reaction to the growing challenges of population ageing. To date, SHARE conducted eight waves of data collection and covers all continental EU countries plus Switzerland and Israel. SHARE explores this cross-country setting as ‘natural laboratory’ across scientific disciplines and over time in order to turn the challenges of population ageing into opportunities and provide policy makers with reliable information for evidence-based policies.

SHARE applies a concept of ex-ante harmonisation: there is one common generic questionnaire that our country teams translate into the national languages (in some countries more than one language) using an internet-based translation tool. However, some internationally highly diverse variables require country-specific measurements and ex-post harmonisation, for example in the areas of education (ISCED) or occupation (ISCO, NACE).

Usually, SHARE data collection is based on computer-assisted personal interviewing (CAPI) because it makes the execution of physical tests possible. The interviewers conduct face-to-face interviews using a laptop on which the CAPI instrument is installed.

For further general information on SHARE and regular updates, please visit the project website at <https://share-eric.eu/>

For a detailed description of the previous SHARE waves, eligibility and how to use the data, please see Release Guide 9.0.0.

4 The SHARE Corona Survey

4.1 Switch to telephone interviewing during the COVID-19-pandemic

The outbreak of COVID-19 hit SHARE in the middle of its 8th Wave of data collection and the fieldwork had to be suspended in all participating countries in March 2020. At this point in time, about 70 percent of all expected interviews in the panel sample across countries had been conducted.

To resume fieldwork, a switch to telephone administered interviews (CATI) was decided and a specific questionnaire was developed covering the same topics as the regular SHARE questionnaire - but considerably shortened and targeted to the COVID-19 living situation of people who are 50 years and older. Based on methodological considerations in connection with the health protection of respondents and interviewers, the use of CATI was the preferred alternative to the previous face-to-face-interviewing. For a more detailed description see:

Scherpenzeel, A., Axt, K., Bergmann, M., Douhou, S., Oepen, A., Sand, G., Schuller, K., Stuck, S., Wagner, M., & Börsch-Supan, A. (2020). [Collecting survey data among the 50+ population during the COVID-19 outbreak: The Survey of Health, Ageing and Retirement in Europe \(SHARE\)](#). *Survey Research Methods*, 14(2), 217-221.

4.2 Content of the SHARE Corona data

The generic and the country-specific questionnaires of the first SHARE Corona Survey are available [here](#). The slightly different questionnaire of the second SHARE Corona Survey is available [here](#). The questionnaires cover the most important life domains of the target population and asks specific questions about infections and changes in life during the pandemic:

Health and health behaviour

General health before and after the COVID-19 outbreak, practice of safety measures (e.g. social distancing, wearing a mask)

Mental health

Anxiety, depression, sleeping problems, and loneliness before and after the COVID-19 outbreak

Infections and healthcare

COVID-19 related symptoms, SARS-CoV-2 testing and hospitalization, forgone medical treatment, satisfaction with treatments, vaccination status (only in 2nd SCS available)

Changes in work and economic situation

Unemployment, business closures, working from home, changes in working hours and income, financial support

Social networks

Changes in personal contacts with family and friends, help given and received, personal care given and received.

The naming of items in the SHARE Corona Survey is based on the following principles:

- Items that are identical to previous waves of data collection have the same label plus prefix “ca”
→ Example: *cadn003_* on year of birth
- New items related to a COVID-19 infection are followed by a “c” after the prefix
→ Example: *cac002_* on COVID-19 symptoms
- Items that refer to existing items that needed to be adapted to the specific circumstances during the pandemic can be identified by an “8” in the front of the numbering indicating that the item was introduced in Wave 8
→ Example: *caep805_* on employment status after the outbreak of Corona

Additional to basic household information provided in the coverscreen module and information covered by the SHARE Corona Questionnaire, the release includes weights as part of the *gv_weights_ca* modules for handling unit nonresponse and attrition errors.

Another module is *sharew8_rel8-0-0_ca_at* containing the Austrian SHARE Corona Survey data conducted later than in the countries. The fieldwork period in Austria was between end of July and end of September 2020 whereas all other countries finished fieldwork before the mid of August (see Table 1). Furthermore, the *sharew8_rel8-0-0_xc* module includes additional pandemic related data conducted via telephone interviews in Austria and the Czech Republic between September 2020 and January 2021.

4.3 Sample and fieldwork design

For the instrument of the SHARE Corona Survey, the sample included 1) panel members who had not been interviewed in Wave 8 before the suspension of fieldwork and 2) panel members who had already been interviewed in Wave 8. Both respondent groups received the same questionnaire; the only difference is that the panel members who had not been interviewed face-to-face in Wave 8 were asked questions on changes in the household composition since their last interview (Coverscreen). Respondents who had already been asked in Wave 8 did not have to answer these questions again. However, the coverscreen (*cv_r*) module of the 1st SCS includes information on household composition for all households that participated in the first SHARE Corona Survey. Users need to be aware, that this information might be collected during the regular fieldwork of Wave 8 and thus not at the same time as the SHARE Corona data. The variable *cvdate* as part of the *cv_r* module informs the user in which field phase the information was collected. The *update_ca* variables indicate when specific *cv_r* variables were subject to change in the second field phase of the interview.

Regarding the fieldwork design, several aspects of the normal SHARE fieldwork design had to be adapted because of the mode switch from CAPI to CATI. However, SHARE's principle of ex-ante harmonization by providing the same software tools and programmed questionnaire to all survey agencies was also followed for the CATI.

4.4 Participating countries

Table 1: Countries & Fieldwork Times

Country ID	Country	Fieldwork time 1 st SCS in 2020	Fieldwork time 2 nd SCS in 2021
11	Austria ¹	July 20 th – September 30 th	June 22 nd – August 5 th
12	Germany	June 19 th – August 3 rd	June 29 th – August 3 rd
13	Sweden	June 17 th – August 14 th	June 28 th – August 13 th
14	Netherlands	June 19 th – July 31 st	June 10 th – August 3 rd
15	Spain	June 11 th – August 10 th	June 9 th – August 14 th
16	Italy	June 9 th – July 31 st	June 9 th – August 6 th
17	France	June 16 th – July 31 st	June 8 th – July 30 th
18	Denmark	June 10 th – August 7 th	June 20 th – August 2 nd
19	Greece	June 12 th – August 7 th	June 21 th – August 10 th
20	Switzerland	June 9 th – August 6 th	June 10 th – August 5 th
23	Belgium	June 8 th – August 10 th	June 8 th – August 1 st
25	Israel	June 4 th – August 5 th	June 2 nd – August 4 th
28	Czech Republic	June 8 th – August 6 th	June 3 rd – August 4 th
29	Poland	June 8 th – August 5 th	June 9 th – August 10 th
31	Luxembourg	June 25 th – August 5 th	June 14 th – July 28 th
32	Hungary	June 18 th – August 11 th	June 16 th – August 9 th
33	Portugal	June 11 th – August 10 th	June 5 th – August 4 th
34	Slovenia	June 8 th – August 12 th	June 4 th – July 26 th
35	Estonia	June 8 th – July 27 th	June 10 th – August 1 st
47	Croatia	June 15 th – August 9 th	June 17 th – August 1 st
48	Lithuania	June 13 th – July 31 st	June 8 th – July 8 th
51	Bulgaria	July 2 nd – August 14 th	June 9 th – August 12 th
53	Cyprus	June 11 th – August 10 th	June 8 th – August 14 th
55	Finland	June 12 th – August 10 th	June 16 th – August 4 th
57	Latvia	June 24 th – August 11 th	June 11 th – August 2 nd
59	Malta	June 11 th – August 10 th	June 21 st – August 13 th
61	Romania	June 9 th – August 11 th	June 13 th – August 1 st
63	Slovakia	June 12 th – July 30 th	June 10 th – July 12 th

¹ Due to the later fieldwork period, the Austrian SHARE Corona Survey data are provided as separate module.

4.5 Weights

Giuseppe De Luca & Paolo Li Donni – University of Palermo

Based on the participation in the two survey instruments of wave 8, one can distinguish three subsamples in the 1st SCS of primary interest: CAPI, CATI and CAPI & CATI. In contrast to that, a differentiation of subsamples is not necessary in the 2nd SCS as there was only one survey instrument.

The baseline strategy adopted by SHARE to deal with problems of unit nonresponse and panel attrition relies again on the calibration approach of Deville and Särndal (1992). For each subsample we always provide calibrated cross-sectional weights, as well as calibrated weights at individual level for inference to the target population of individuals and calibrated weights at the household level for inference to the target population of households. For the purposes of longitudinal analyses, we also provide calibrated longitudinal weights for the balanced sample of respondents who have participated in the first two waves of the SCS. As for cross-sectional calibrated weights, the longitudinal calibrated weights are defined both at the individual and at the household levels. The calibration procedure for calibrated cross-sectional and longitudinal weights coincides with that described in chapter 15.2 of Release Guide 9.0.0 for the CAPI subsample.

Calibrated cross-sectional and longitudinal weights of the SHARE Corona Survey

The SHARE release 9.0.0 includes two sets of calibrated cross-sectional weights for the first two waves of the SHARE Corona Survey and a set of calibrated longitudinal weights for the balanced panel of respondents who participated in both waves of the study.

As for release 8.0.0, the new release 9.0.0 includes separate sets of calibrated weights for the CAPI, CATI, and CAPI&CATI subsamples. The target population of the last two subsamples has been however redefined as the 50+ population in 2016 that survives up to 2020. As usual, the calibrated cross-sectional weights of each subsample were computed separately by country using a logit specification of the calibration function, a first set of population margins for the gender-age groups (i.e., males and females in the age classes [50-59], [60-69], [70-79], [80+)), and a second set of population margins for the 2016 NUTS1 regional areas. The weights of each subsample were also defined at the individual level for inference to the target population of individuals and at the household level for inference to the target population of households.

For the calibrated cross-sectional weights of the second SHARE Corona Survey, we maintained the distinction between individual-level and household-level weights, but not the distinction between the CAPI, CATI, and CAPI&CATI subsamples. These weights were computed for the cross-sectional sample of 49,254 respondents and 33,109 households who participated in the CATI of the second wave, irrespective of whether they also participated in the CATI of the first wave. The population margins are like those of the calibrated cross-section weights of the first wave, but they now refer to the national 50+ populations in 2016 that survive up to 2021.

Calibrated longitudinal weights were computed for the balanced panel of 48,357 respondents and 33,109 households who participated in the first and second SHARE Corona Survey. Compared to the two cross-sectional samples, this sample excludes the 9,203 respondents who participated only in the first and the 897 respondents who participated only in the second SHARE Corona Survey. The target population coincides with that of the second wave, but the calibrated longitudinal weights were constructed by controlling for the population margins of the gender-age groups only.

4.6 Imputations

i. Imputations of missing values in SCS1

Imputations for the CATI data of the 1st SCS were constructed separately from the imputations for the CAPI data. Since the fraction of missing values in the CATI data was generally much less than 3 per cent, the imputation procedure for this data set draws mainly on the hot-deck method. Two exceptions worth noting are the monetary variables on overall monthly household income before the outbreak (CAHH017) and the lowest overall monthly household income since the outbreak (CAE005). As for the monetary variables collected in the standard CAPI questionnaire, these two open-ended questions are very sensitive and difficult to answer precisely, especially in a CATI mode. In addition, unlike the CAPI questionnaire, the CATI questionnaire does not include sequences of unfolding bracket questions that may allow valuable interval data on the missing monetary amounts to be recovered.

In addition to missing data due to “Don’t know” and “Refusal” answers, for some variables we also imputed other types of data inconsistencies due to routing errors in Section E (Economic situation) and measurement errors in Section W (Work) of the CATI questionnaire. Specifically, Section E depends on a filter variable, *CAE001*, which controls in turn all other questions included in this section (i.e. all variables starting with CAE). The problem is that, by design, this section would have to be asked only to the first respondent in the household. However, the filter variable was not automatically assigned by the interviewing software, but rather it was left open for selection by the respondent/interviewer. Thus, instead of having only one respondent per household, the data contain a set of households who have skipped all questions in the economic section and another set of households with two respondents per household. For the specific purposes of imputations, we adopted the following strategy: in households that skipped the economic section, we imputed the missing values on all variables of this section by selecting the household member with the minimum person identifier (*mergeid*). In households that have two respondents per household, we selected first the respondent with the largest number of valid answers to the remaining variables of the economic section. Depending on the number of valid answers, we then selected the respondent with the minimum person identifier within each household. The CATI imputation database contains an indicator variable (*RESP_E*) that allows the household member who was selected as the eligible respondent for the economic section to be identified.

In Section W, respondents who reported being employed or self-employed at the time when COVID-19 broke out were first asked about their usual working hours per week before the outbreak (*CAW020*). Next, respondents were asked whether they reduced/increased the number of working hours and finally the lowest/highest number of hours of work since the outbreak (*CAW021*, *CAW022*, *CAW024*, *CAW025*). These variables were affected by two types of measurement errors: (i) people who reported a reduction in the number of working hours, but the lowest number of hours of work since the outbreak was in fact greater than or equal to the number of hours of work before the outbreak; (ii) people who reported an increase in the number of working hours, but the highest number of hours of work since the outbreak was in fact smaller than or equal to the number of hours of work before the outbreak. To handle these types of measurement errors, we imputed in this case all data inconsistencies due to misreporting on the sequence of variables *CAW020*, *CAW021*, *CAW022*, *CAW024* and *CAW025*.

The imputation procedure for these five variables of Section W and other eleven variables of Section E is based on the Fully Conditional Specification (FCS) method. One important difference with respect to the FCS method used to impute the monetary variables of the CAPI questionnaire is that we account for the continuous, binary or categorical nature of the sixteen variables that need to be imputed jointly.

a) Hot-deck imputations. We performed hot-deck imputations separately by country and according to a convenient order of the variables that accounts for branching and skip patterns in the CATI questionnaire. Imputation classes for the implementation of this method were based on the following set of auxiliary variables: country, gender, five age classes ([– 49], [50– 59], [60– 69], [70 – 79], [80+]), a binary indicator for respondents living with a spouse/partner, five groups for years of education, a binary indicator for good self-perceived health before the outbreak, and a binary indicator for changes in the self-perceived health status during the outbreak. The first four auxiliary variables are fully observed, while the last three auxiliary variables contain very small fractions of missing values that were imputed first using only the first four variables. Since the CATI data consist of longitudinal respondents only, the information on years of education was obtained by the most recent CAPI data available for each respondent. For some variables we exploited a larger set of auxiliary variables. For example, we used two additional binary indicators for wearing a face mask in public spaces and keeping distance from others in public when imputing several variables included in Section H (Health and health behaviour), Section C (Corona-related infection) and Section Q (Quality of healthcare) of the CATI questionnaire. Furthermore, we jointly imputed missing values on the variables that are logically related. Specifically, in Section H, we jointly imputed variables regarding illness or health conditions since the last interview (*CAH003* and *CAH004*). In Section C, we imputed jointly variables regarding the COVID-19 symptoms (*CAC002* and *CAC003*), whether testing positive (*CAC004* and *CAC005*) or negative (*CAC007* and *CAC008*) for coronavirus, and whether being hospitalised (*CAC010* and *CAC011*) or having died (*CAC013* and *CAC014*) due to an infection from coronavirus. In Section Q, we imputed jointly variables

regarding forwent medical treatment since the outbreak (*CAQ005* and *CAQ006*), postponed medical appointment (*CAQ010* and *CAQ011*), denied medical appointment (*CAQ015* and *CAQ016*), whether treated in hospital and the associated level of satisfaction (*CA025* and *CA027*), and whether visited by a doctor and the associated level of satisfaction (*CAQ020* and *CAQ022*).

In total, we imputed sequentially by the hot-deck method about 200 variables. As for the hot-deck imputations of the CAPI data, the CATI imputation database contains five multiple imputations of the missing values and a flag variable associated to each imputed variable which allows the users to identify the imputed observations.

b) FCS imputations. After the hot-deck imputations, we constructed the FCS imputations for the missing values on the five hours of work variables collected in Section W (*CAW020*, *CAW021*, *CAW022*, *CAW024* and *CAW025*) and other eleven variables collected in Section E: overall monthly household income before the outbreak (*CAHH017*), lowest overall monthly household income since the outbreak (*CAE005*), a set of six binary indicators for received financial support (*CAE003* and *CAE004*), household's ability to make ends meet (*CACO007*), a binary indicator for the postponement of regular payments (*CAE011*) and a binary indicator for dipping into savings to cover the necessary day-to-day expenses (*CAE012*). FCS imputations of these sixteen variables were always constructed separately by country. We do not use separate imputation models for different household types, but we always include a binary indicator for living with a spouse/partner in our set of observed predictors.

At each iteration of the Gibb sampling algorithm, we used a linear regression model for the continuous variables (*CAW020*, *CAW022*, *CAW025*, *CAHH017* and *CAE005*), a logit model for four binary variables (*CAW021*, *CAW024*, *CAE011* and *CAE012*), a multinomial logit model for the categorical variable *CACO007*, and the multivariate hot-deck method for the six binary indicators related to financial support received since the outbreak (*CAE003* and *CAE004*).

For the *CAHH017* and *CAE005* variables, we symmetrically trimmed 2 percent of the complete cases from the country-specific distribution of each variable to exclude (and then impute) outliers that may have a large influence on survey statistics. Furthermore, we transformed all continuous variables using either the logarithm (*CAW020*, *CAW025* and *CAHH017*) or the inverse hyperbolic sine (*CAW022* and *CAE005*) transformations to reduce skewness in the left tails of their distributions. In addition to the variables imputed jointly in the Gibb sampling, we used as observed predictors a binary indicator for female respondents, a quadratic polynomial in age, years of education, a binary indicator for living with a spouse/partner and its interaction with age of the spouse/partner, a binary indicator for good self-perceived health and a binary indicator for changes in the self-perceived health status during the outbreak. In the linear regression models for *CAHH017* and *CAE005* and in the multinomial model for *CACO007*, we also included as observed predictors a binary indicator for being employed before the outbreak. For the multivariate hot-deck imputations of the six binary indicators related to financial support received since the outbreak we used instead a similar set of observed predictors (properly discretized to form the imputation classes) plus the

quantiles of *CAE005* computed at each iteration of the Gibb sampling algorithm. The final FCS imputation model adopted in each country was subject to an accurate fine-tuning for the choice of the predictors. Specifically, we had to impose a set of country and item-specific exclusion restrictions to avoid possible problems of collinearity, very imprecise estimates, as well as problems of convergence and perfect prediction in the context of non-linear models. As for the other types of imputations in SHARE, we always provide five multiple imputations of the missing values. After an initial set of 15 burn-in iterations, convergence of the Gibbs sampling algorithm was assessed by the Gelman-Rubin criterion applied to the mean, median and 90th percentile of the distribution of each continuous variable and the mean of the distribution of each discrete variable. In all countries, convergence was achieved before the 50th iteration.

ii. Imputations of missing values in SCS2

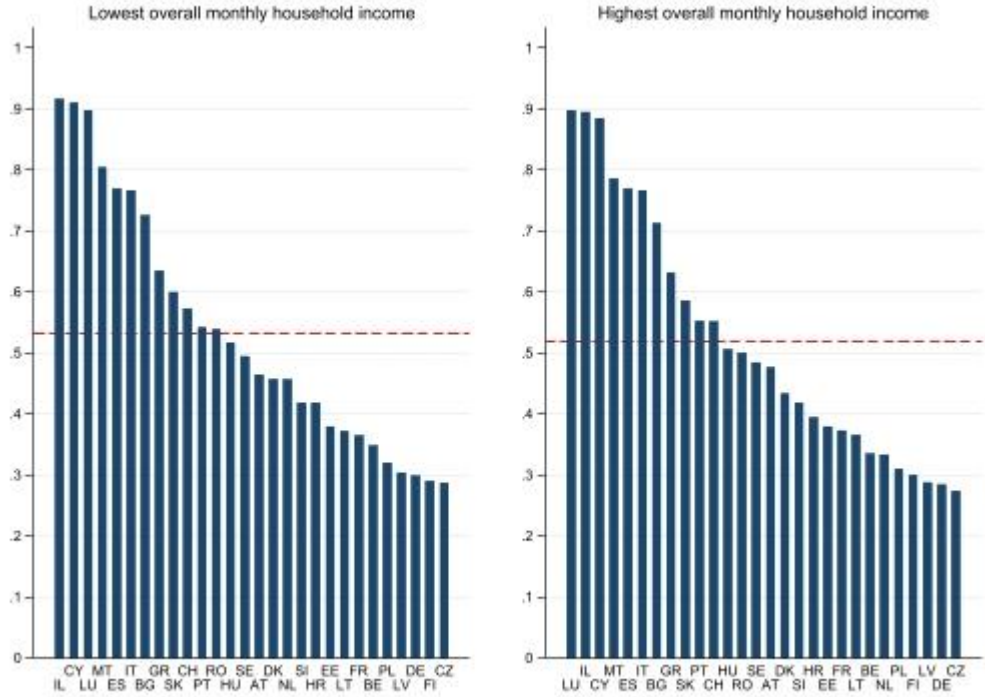
Since item nonresponse rates in the CATI data of the second SHARE Corona Survey were generally much less than 5 per cent, most variables were imputed by the hot-deck method. We used the FCS method only for 15 variables collected in Section E (Economic situation) and Section W (Work) of the questionnaire administered in the second wave. As for the first SHARE Corona Survey, the variables collected in these two sections suffer from somewhat larger amounts of item nonresponse errors. Moreover, Section E contains missing data by design due to the presence of a routing error in its filter variable *CAE001* (see De Luca et al. 2021). Regarding possible issues of data comparability across the two waves of this survey, we note that seemingly similar questions may present relevant differences in terms of question wording, answer categories, time-reference period, branching, and skip patterns. To mark these differences within the generated dataset of imputations, we assigned slightly different variable names to items whose comparability is more doubtful.

a) Hot-deck imputations. We first computed hot-deck imputations separately by country and according to a convenient order of the variables that accounts for branching and skip patterns in the CATI questionnaire of the second wave. The imputation classes for this method were generally based on the following set of auxiliary variables: country, gender, five age classes ([– 49], [50– 59], [60– 69], [70 – 79], [80+]), a binary indicator for respondents living with a spouse/partner, five groups for years of education ([– 5], [6–10], [11–15], [16–20], [21+]), a binary indicator for good self-perceived health, and a binary indicator for changes in the self-perceived health status during the last three months. The first four auxiliary variables are fully observed, while the last three auxiliary variables contain very small fractions of missing values that were imputed first using only the first four variables. For some variables, we employed a larger set of auxiliary variables. For example, we used one additional binary indicator for keeping distance from others in public when imputing several variables included in Section H (Health and health behavior), Section C (Corona-related infection), and Section Q (Quality of healthcare) of the CATI questionnaire of the second SHARE Corona Survey. Furthermore, we jointly imputed missing values on the variables that are logically related. For example, we jointly imputed variables related to illness or health conditions since the last interview

(CAH004) in Section H, those related to the COVID-19 symptoms (CAC102, CAC103) in Section C, and those related to forwent medical treatment since the outbreak (CAQ105 and CAQ106) in Section Q. In total, we imputed sequentially about 200 variables. As for the hot-deck imputations of the CAPI data collected in the regular SHARE waves, the imputation databases of the first and the second SHARE Corona Surveys contain five multiple imputations of the missing values and a flag variable for each imputed variable which allows the users to identify the imputed observations.

b) FCS imputations. After hot-deck imputations, we constructed FCS imputations for fifteen variables: four of them related to changes in hours of work (namely CAW121, CAW122, CAW124, and CAW125), and the other eleven related to changes in the financial situation of the household (namely CAE100, CAE105, CAE107, CACO107, CAE111, CAE112, CAE103, and CAE104). As shown in Figure 3, the two most worrisome variables are the lowest (CAE107) and the highest (CAE105) overall amounts of monthly household income after taxes and contributions. In particular, the first respondent of each household was first asked whether monthly household income had been the same every month since the last interview (CAE100). Respondents who provided a negative answer to this question were then asked to report the lowest and the highest overall amounts of monthly household income. The unweighted cross-country average of the item nonresponse rates for these two variables are 53 and 51 per cent, respectively. In Luxemburg, Israel, Cyprus, and Malta, where the item nonresponse rates are around 90 per cent, we adopted a country-pooling strategy to increase the extremely low number of donors.

Figure 3: Item nonresponse rates for lowest and highest overall monthly household income by country



Except for these more problematic cases, FCS imputations were constructed separately by country. At each iteration of the Gibb sampling algorithm, we used a linear regression model for the continuous variables (CAE105 and CAE107), a simple hot-deck method for the lowest and the highest hours of work (CAW122 and CAW125), a logit model for five binary variables (CAW121, CAW124, CAE100, CAE111, and CAE112), a multinomial logit model for the categorical variable CACO107, and a multivariate hot-deck method for the six binary indicators related to financial support received since the outbreak (CAE103 and CAE104). For the variables CAE105 and CAE107, we symmetrically trimmed 2 per cent of the complete cases from the country-specific distribution of each variable to exclude (and then impute) outliers that may have a large influence on survey statistics. In addition to the variables imputed jointly within the Gibb sampling, our baseline set of observed predictors consists of age, years of education, and binary indicators for female respondents, living with a spouse/partner, and good self-perceived health. For all variables of Section E, we also used a binary indicator for being retired. For the variables imputed by either simple or multivariate hot-deck methods, all continuous predictors within the Gibb sampling were discretized to form the imputation classes. In some cases, we imposed a set of country and item-specific exclusion restrictions to avoid possible problems of collinearity, imprecise estimates, and convergence problems in the context of non-linear models. As for the other types of imputations provided by SHARE, we always provide five multiple imputations of the missing values. After an initial set of burn-in iterations, convergence of the Gibbs sampling algorithm was assessed by the Gelman – Rubin criterion applied to the mean, median, and 90th percentile of the distribution of each continuous variable and the mean of the distribution of each discrete variable.

4.7 Data Access

Access to the data is provided free of charge for scientists worldwide. After registration as a SHARE user, the SHARE users can easily log in to the SHARE Research Data Center and download the SHARE data sets. Please find more information here: <https://share-eric.eu/data/data-access>In addition to the interview month and year of the COVID-19 interviews, which are included in the cv_r module, registered SHARE users can apply for access to an additional data set that includes the date of the COVID-19 interviews. To be granted access to this data, users have to fill in and sign a [special user statement](#) in which they are requested to provide a comprehensible justification why access to this data is needed in order to carry out their scientific research. After submission of the statement to info@share-project.org, SHARE Central will review the application. In the case of successful applications, the respective user will be informed that they can access the data via their SHARE user accounts and download the COVID-19 Survey Interview Date data from the SHARE Research Data Center.

4.8 Citation Requirements

For the SHARE Corona Survey 1 data set:

SHARE-ERIC (2024). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8. COVID-19 Survey 1. Release version: 9.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w8ca.900

For the SHARE Corona Survey 2 data set:

SHARE-ERIC (2024). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 9. COVID-19 Survey 1. Release version: 9.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w9ca.900

For the SHARE Corona Survey 1 interview date data set:

SHARE-ERIC (2024). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 8. COVID-19 Survey 1 Interview Date. Release version: 9.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w8caintd.900

For the SHARE Corona Survey 2 interview date data set:

SHARE-ERIC (2024). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 9. COVID-19 Survey 2 Interview Date. Release version: 9.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w9caintd.900

In addition, when using data from the SHARE Corona Surveys, it is mandatory for users to cite the following publication:

Scherpenzeel, A., K. Axt, M. Bergmann, S. Douhou, A. Oepen, G. Sand, K. Schuller, S. Stuck, M. Wagner, A. Börsch-Supan (2020). Collecting Survey Data among the 50+ Population during the COVID-19 Outbreak: The Survey of Health, Ageing and Retirement in Europe (SHARE). *Survey Research Methods* 14 (2): DOI: 10.18148/srm/2020.v14i2.7738.

And please do not forget to report all your publications (not only journal articles but also books, book chapters, working papers, discussion papers, theses, etc.; also non-English) to SHARE Central via info@share-project.org