
SHARE WORKING PAPER SERIES

Survey participation in the Eighth Wave of the Survey of Health, Ageing and Retirement in Europe (SHARE)

Michael Bergmann, Thorsten Kneip,
Giuseppe De Luca, Annette Scherpenzeel

Working Paper Series 81-2022

DOI: 10.17617/2.3390284

SHARE-ERIC | Amalienstr. 33 | 80799 Munich | Germany | share-eric.eu



About the SHARE Working Paper Series

The series is designed to provide a timely discussion of results based on SHARE data within the SHARE family, i.e., members of the SHARE Country Teams, Area Coordination Teams and other SHARE bodies. The papers are not peer reviewed; the authors are solely responsible for the scientific content and the graphical layout of their submissions. The respective Country Team Leaders and Area Coordinators are encouraged to look over the submissions by their team members.

The publisher (SHARE ERIC) checks working papers in this series for formal issues such as proper acknowledgements to the funders of SHARE. The publisher takes no responsibility for the scientific content of the paper.

Acknowledgements

Acknowledgment: This paper uses data from SHARE Waves 1, 2, 3, 4, 5, 6, 7 and 8 (DOIs: 10.6103/SHARE.w1.800, 10.6103/SHARE.w2.800, 10.6103/SHARE.w3.800, 10.6103/SHARE.w4.800, 10.6103/SHARE.w5.800, 10.6103/SHARE.w6.800, 10.6103/SHARE.w7.800, 10.6103/SHARE.w8.800, 10.6103/SHARE.w8ca.800, see Börsch-Supan et al. (2013) for methodological details. The SHARE data collection has been funded by the European Commission, DG RTD through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982, DASISH: GA N°283646) and Horizon 2020 (SHARE-DEV3: GA N°676536, SHARE-COHESION: GA N°870628, SERISS: GA N°654221, SSHOC: GA N°823782, SHARE-COVID19: GA N°101015924) and by DG Employment, Social Affairs & Inclusion through VS 2015/0195, VS 2016/0135, VS 2018/0285, VS 2019/0332, and VS 2020/0313. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01, IAG_BSR06-11, OGHA_04-064, HHSN271201300071C, RAG052527A) and from various national funding sources is gratefully acknowledged (see www.share-project.org).

Survey participation in the Eighth Wave of the Survey of Health, Ageing and Retirement in Europe (SHARE)

Based on Release 8.0.0

Michael Bergmann^{a,b}, Thorsten Kneip^b, Giuseppe De Luca^c, Annette Scherpenzeel^{a,b}

^a Technical University of Munich (Chair for the Economics of Aging)

^b Munich Center for the Economics of Aging (MEA),
Max Planck Institute for Social Law and Social Policy

^c Università degli Studi di Palermo

Abstract: This data documentation is meant to provide users of the Survey of Health, Ageing and Retirement in Europe (SHARE) with a general overview about the participation of respondents in the eighth wave of the survey. Because of the special circumstances connected with the outbreak of the COVID-19 pandemic this report differs from previous ones. At the beginning of 2020, COVID-19 was spreading quickly across Europe, leading to a suspension of SHARE fieldwork in all participating countries in March 2020. At this point, large parts of the panel sample have already been interviewed, while only a small part of the planned refreshment interviews could be conducted. The focus of this report is thus on the development of the panel sample over time, i.e. the wave-to-wave participatory behavior of initial samples, entrance patterns of new sample members, and success of achieving so-called end-of-life interviews, usually with the partner or a close relative when the respondent has died. Detailed information of household and individual participation in the baseline or refreshment samples will only be reported after the release of the Wave 9 data. All numbers and figures reported in this documentation are based on information from the SHARE sample management system using Release 8.0.0, also including the 1st SHARE Corona Survey conducted in summer 2020.

Keywords: survey participation, panel retention, data quality, SHARE, SHARE Corona Survey

Acknowledgment: This paper uses data from SHARE Waves 1, 2, 3, 4, 5, 6, 7 and 8 (DOIs: [10.6103/SHARE.w1.800](https://doi.org/10.6103/SHARE.w1.800), [10.6103/SHARE.w2.800](https://doi.org/10.6103/SHARE.w2.800), [10.6103/SHARE.w3.800](https://doi.org/10.6103/SHARE.w3.800), [10.6103/SHARE.w4.800](https://doi.org/10.6103/SHARE.w4.800), [10.6103/SHARE.w5.800](https://doi.org/10.6103/SHARE.w5.800), [10.6103/SHARE.w6.800](https://doi.org/10.6103/SHARE.w6.800), [10.6103/SHARE.w7.800](https://doi.org/10.6103/SHARE.w7.800), [10.6103/SHARE.w8.800](https://doi.org/10.6103/SHARE.w8.800), [10.6103/SHARE.w8ca.800](https://doi.org/10.6103/SHARE.w8ca.800), see Börsch-Supan et al. (2013) for methodological details. The SHARE data collection has been funded by the European Commission, DG RTD through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982, DASISH: GA N°283646) and Horizon 2020 (SHARE-DEV3: GA N°676536, SHARE-COHESION: GA N°870628, SERISS: GA N°654221, SSHOC: GA N°823782, SHARE-COVID19: GA N°101015924) and by DG Employment, Social Affairs & Inclusion through VS 2015/0195, VS 2016/0135, VS 2018/0285, VS 2019/0332, and VS 2020/0313. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S.

National Institute on Aging (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01, IAG_BSR06-11, OGHA_04-064, HHSN271201300071C, RAG052527A) and from various national funding sources is gratefully acknowledged (see www.share-project.org).

Please cite as: Bergmann, M. Kneip, T., De Luca, G., & Scherpenzeel, A. (2022). Survey participation in the Eighth Wave of the Survey of Health, Ageing and Retirement in Europe (SHARE). Based on Release 8.0.0. SHARE Working Paper Series 81-2022. Munich: SHARE-ERIC.

1. Introduction

This data documentation is meant to provide users of the Survey of Health, Ageing and Retirement in Europe (SHARE; Börsch-Supan, et al., 2013) with a general overview about the participation of respondents in the eighth wave of the survey. It thus complements the previous reports on survey participation in SHARE that are mainly based on data during and at the end of fieldwork (Blom & Schröder, 2011; De Luca & Peracchi, 2005; Kneip, 2013; Kneip, Malter, & Sand, 2015; Malter, 2013; Malter & Sand, 2017; Sand, 2019, 2021). SHARE is a multidisciplinary and cross-national panel study, which is conducted biannually since 2004. By collecting data on health, socioeconomic status, and social and family networks from individuals aged 50 and older and their partners, it strongly contributes to the understanding of the ageing process in Europe. In the eighth wave of SHARE and the 1st SHARE Corona Survey (SCS; see Scherpenzeel et al., 2020 for more information on the implementation of this extra survey), data from all 26 Continental EU Member States (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal¹, Romania, Slovenia, Slovakia, Spain including the region of Girona², and Sweden) plus Switzerland and Israel have been collected (see Figure 1).³ With the public release of Wave 8 in spring 2022, the data available to the scientific community are currently based on around 530,000 interviews with 140,000 respondents. The postponed face-to-face fieldwork of the suspended Wave 8 refreshment samples could be picked up again during Wave 9. However, this implies that the detailed description of household and individual participation in the baseline or refreshment sample by wave, country, and certain subgroups will only be reported after the release of the Wave 9 data, planned for 2023.

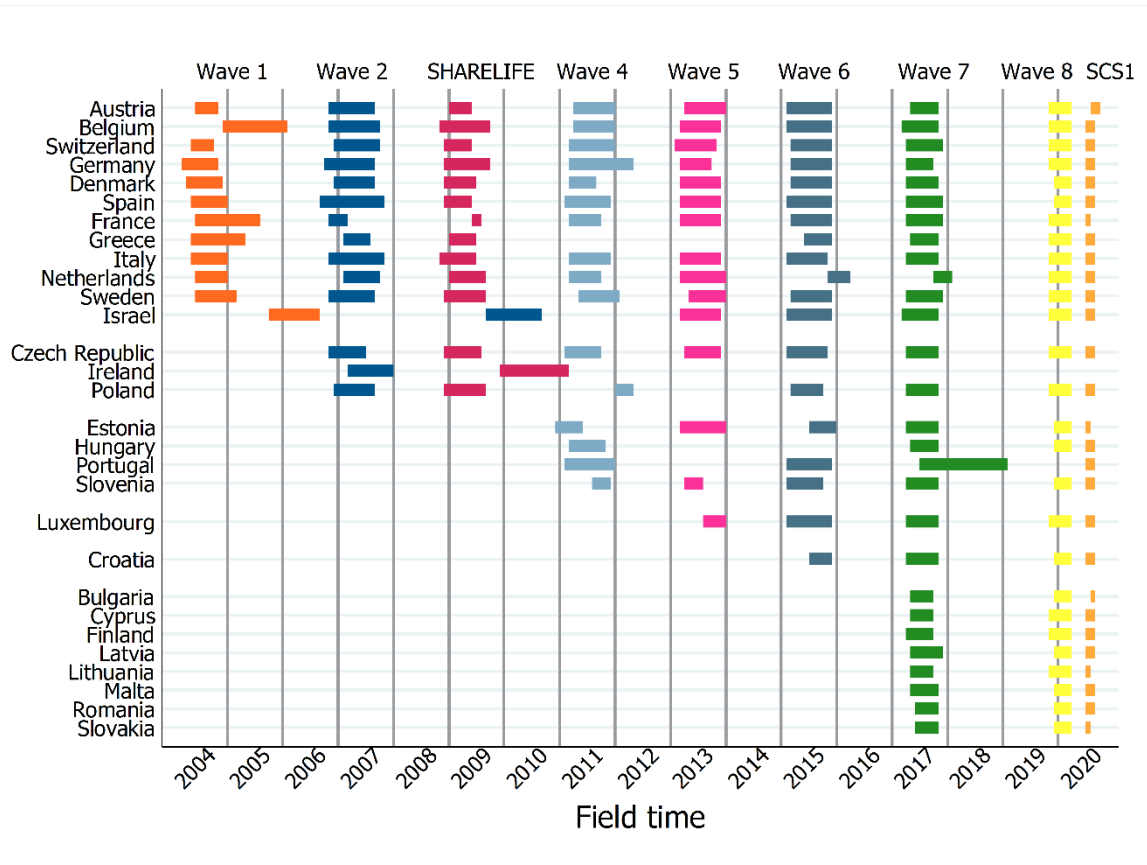
The term survey participation is used here to describe how many households and individuals of the initial gross samples delivered completed interviews, how many were found to be ineligible, and how many did not respond. In the following, survey participation patterns are presented for longitudinal samples from countries that have already participated in SHARE before. The focus is hence on response behavior at subsequent waves, i.e. on panel retention.

¹ Due to the suspension of fieldwork, face-to-face interviews could not be collected in Portugal in Wave 8. However, Portugal participated in the 1st SCS.

² While the region of Girona was included in the face-to-face data collection in Wave 8, Girona did not participate in the 1st SCS.

³ Furthermore, SHARE is harmonised with similar panel surveys in the British Isles, the United States, Japan, Korea, China, India, Mexico, Brazil, and South Africa.

Figure 1: Field times in SHARE



Note: England participates in the English Longitudinal Survey on Ageing (ELSA), a harmonised sister study of SHARE. The same holds for Ireland since Wave 4, when the Irish Longitudinal Study on Ageing (TILDA) was established. In the Netherlands, SHARE had to use an online mode in Waves 6 and 7. Israel followed a different schedule for Waves 1 and 2.

The remainder of this documentation is organised as follows: We start with describing the longitudinal development of the sample composition in SHARE (Section 2). Here, we first report the development of successful interviews, before we present the wave-to-wave retention of the longitudinal samples. In this respect, we distinguish between retention rates with and without recovery of former respondents, as well as new or missing partners that have not participated in SHARE before (Subsections 2.1 to 2.3). Afterwards, we assess potential data quality issues due to the stop of fieldwork in March 2020 caused by the COVID-19 outbreak (Subsection 2.4). Finally, we report the success of achieving so called end-of-life interviews with the partner or a close relative when the respondent has died (Subsection 2.5). All numbers and figures reported in this documentation are based on information from the SHARE sample management system (Sample CTRL) using Release 8.0.0. Information on the different sampling frames and sampling designs that have been applied in SHARE so far can be found in the previous technical paper on survey participation (Bergmann, Kneip, De Luca, & Scherpenzeel, 2019). In addition, the description of the target population as well as the

eligibility criteria used in SHARE can be found in the Release Guide 8.0.0 (<http://www.share-project.org/data-documentation/release-guides.html>).

2. Survey participation in the SHARE longitudinal samples

In the following, we investigate participation patterns of individuals in SHARE who have been successfully interviewed. We therefore use the terms retention and retention rate (instead of response rate) when it comes to the participation of individuals from the longitudinal sample. For a panel study like SHARE, its value is strongly determined by the long-term participation of panel members over waves. Only if persons can be observed multiple times as time passes by, it is possible to understand their individual ageing processes and to learn how respondents adapt to the changing environment over time. It is therefore of utmost importance to keep former respondents participating in the survey in order to exploit the full potential of SHARE regarding longitudinal analyses and conclusions. As can be seen, this goal is achieved quite well considering the difficulties SHARE is facing with respect to the sample structure of people aged 50 years and older, where natural mortality is a bigger issue than in most other surveys.

After several waves, various types of retention rates can be calculated conditional on previous participation that might differ between countries due to differences in the sample composition. Therefore, the longitudinal samples at the individual level in SHARE are divided into four subsamples for better comparisons: *Subsample A* includes all respondents who participated in the previous wave of the SHARE survey.⁴ *Subsample B* includes those respondents who ever participated in SHARE, but not in the previous wave, and live in a household where at least one household member participated in the previous wave. *Subsample C* includes respondents who ever participated, but not in the previous wave, and do not live in a household where at least one household member participated in the previous wave. Finally, *subsample D* includes missing and new partners who have not participated in SHARE before.

Based on these definitions, individual-level retention in the narrow sense is given by the proportion of respondents in subsample A, excluding any form of recovery (see Subsection 2.1). Additionally, retention in subsamples B and C informs about how well SHARE managed to get respondents back in the study who had already dropped out, while retention in subsample

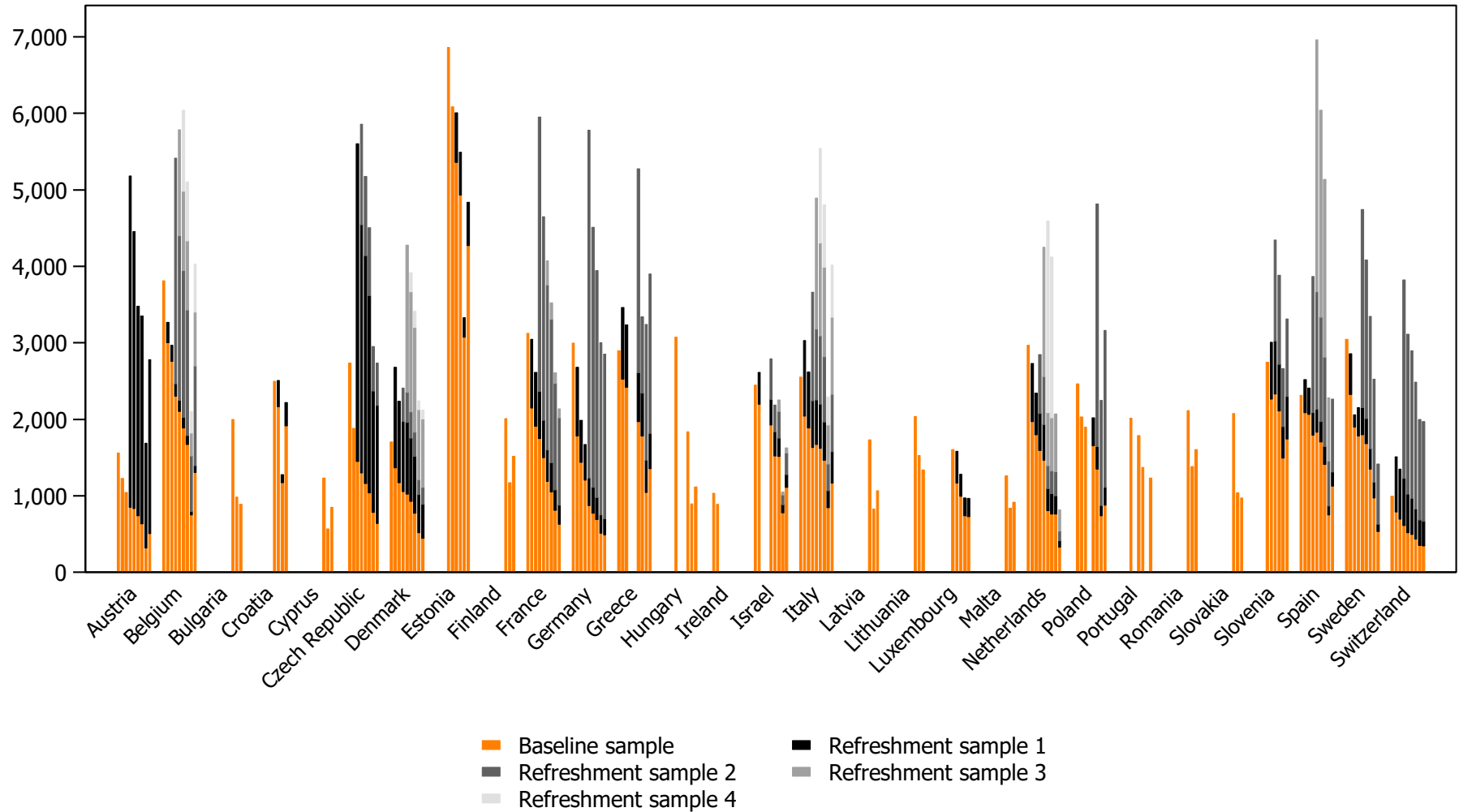
⁴ Since Wave 7, subsample A is further divided into respondents who participated in the last SHARE wave and at least one earlier wave (subsample A1) and respondents who were newly recruited in the last SHARE wave from a baseline/refreshment sample and for whom the current wave is the second participation (subsample A2). Further information and more detailed splits between these subsamples can be found in Sand (2021).

D is informative with respect to eligible persons in panel households never interviewed before (i.e. either new sample members or eligible sample members for which reluctance to participate was overcome after refusals in previous waves). We thus present combined retention and recovery rates that include former respondents (Subsection 2.2) as well as new or missing partners (Subsection 2.3). While the latter focus on the overall sample size development in SHARE, retention including former respondents is the most informative with respect to evaluate the success of maintaining panel respondents in the study. As an attempt to make the rates more comparable – both regarding different sample compositions and other surveys – we calculated annualised retention rates that take gaps as well as the biennial interval between waves in SHARE into account (see last column in tables of Subsection 2.2).

As a starting point, Figure 2 provides an overview about the development of the number of successful interviews in all SHARE samples over time, hence combining retention and recovery. The bars indicate the baseline (orange) and subsequent refreshment (different shades of grey) samples, while the change in the height of the bars illustrate the development of the various samples. The underlying numbers can be found in Table 20 in the Appendix. In addition, this table differentiates between main and end-of-live interviews that are also the focus of Subsection 2.5. As others (e.g., Blom & Schröder, 2011; Kneip, et al., 2015) have shown before, attrition tends to be higher when panel members were approached for their first re-interview than in later waves. One consequence of rather high attrition rates is that the number of cases in the panel decreases, effectively reducing the power of longitudinal analyses. Furthermore, attrition from the panel might affect the sample composition, as certain groups of respondents might be more likely to drop out of the panel. However, previous analyses (Kneip, et al., 2015) found only little if any evidence for selective attrition bias in SHARE. Only the oldest-old show a somewhat higher probability to drop out, which actually might rather be a problem of natural mortality. Consequently, SHARE offers calibrated longitudinal weights that account for mortality of the original target population across waves (see Bergmann, De Luca, & Scherpenzeel, 2017; De Luca, Li Donni, & Rashidi, 2021; De Luca & Rossetti, 2019 for details on the construction of these weights).

In addition to selective attrition, the suspension of fieldwork due to the pandemic posed another difficulty for data quality in SHARE. As the Wave 8 data collection had to be stopped in the middle of fieldwork, a considerable part of the longitudinal sample could not be contacted and interviewed. In the following, we will thus also analyse whether the already conducted part of the longitudinal sample is affected by selective (non-)response (see Subsection 2.4).

Figure 2: Sample development in SHARE



2.1 Wave-to-wave retention excluding recovery

The following tables show the wave-to-wave participatory behavior of panel respondents who participated in the previous wave not distinguishing between main and end-of-life interviews. Recovered respondents who were brought back into the survey after missing one or more wave(s) are thus excluded here (but see Subsections 2.2 and 2.3 for retention rates including recovery). Missing entries are due to the fact that not all countries participated in every wave. Greece, for example, had dropped from SHARE in Wave 4 due to the economic crisis but could be recovered for participation since Wave 6 again. Accordingly, the retention rate reported for Greece in Wave 6 (Table 1, sixth column) refers to respondents last participating in Wave 3. This has to be considered when comparing rates across countries: Since more time has passed between two consecutive participations, the realisation of an interview is more difficult in this case compared to other countries. Gaps with respect to Israel (no participation in Waves 3 and 4), Hungary (no participation in Waves 5 and 6), as well as Poland and Portugal (both no participation in Wave 5) have to be interpreted analogously.⁵

By taking a closer look at the following tables, it can be seen that there is some variation in individual retention rates across countries. Again, a mixture of differences in sampling frames, sample composition (i.e. the proportion of newly recruited panel members via refreshment samples), fieldwork procedures, and legal restrictions between countries to approach respondents refusing in a previous wave are the main causes for this variation. Especially the last aspect plays a key role as some countries have very strict data protection requirements that complicate future participation of interviewed persons. In Germany, for example, all respondents have to be asked at the end of their first SHARE interview whether they agree in writing that their addresses can be stored for future re-contact. This strict legal requirement might explain the lower retention in Germany compared to other countries to some extent (see Table 1). Another reason applies to the Swedish Wave 2 sample (see Table 2, second column). Here, the sample could not be entirely approached in Wave 3, which explains the low retention between Wave 2 and Wave 3. Fortunately, most of these cases could be recovered in Wave 4, which resulted in a much higher retention between Wave 3 and Wave 4 and its stabilisation afterwards (see also Table 8 and Table 14). Moreover, the drop in retention between Wave 5 and Wave 6 in the Netherlands was due to severe cuts in funding that made it necessary to

⁵ Other gaps are due to the following reasons: Ireland only participated in Waves 2 and 3, Portugal did not participate in Wave 8, and the region of Girona (initially sampled in Wave 5) did not participate in the SCS.

conduct the interviews in Wave 6 in a different mode (see Das, De Bruijne, Janssen, & Kalwij, 2017 for more information). The only way to keep the panel dimension of SHARE in the Netherlands was hence a shift from face-to-face to online interviews. Despite the high internet penetration in the Netherlands, the numbers for the transition between Wave 5 and Wave 6 clearly point out the challenges of such a change for an ongoing face-to-face panel study of respondents who were at least 50 years old when participating for the first time in SHARE. Insofar, the low retention rate between Wave 5 and Wave 6 in the Netherlands cannot be directly compared with the rates in other countries. Despite these exceptions, however, there is a clear and consistent increase in retention of long-term panel members suggesting a high overall panel stability that is comparable to other studies with even shorter time intervals between interviews. Also in the Netherlands retention substantially increased in Wave 7, reflecting a high commitment of those respondents who participated in SHARE irrespective of the interview mode.

Finally, the considerable drop of retention rates in Wave 8 (second last column of the following tables in this subchapter) across most countries was mainly caused by the stop of interviewing in the middle of fieldwork due to the outbreak of COVID-19 in March 2020. Differences in retention rates across countries regarding this transition can be explained to large parts by how advanced fieldwork already was before the suspension. Certain countries were thus hit harder than others in terms of the possibility to contact and interview respondents. Despite this crucial event, retention rates stabilised again in the 1st SCS, which was conducted by telephone in summer 2020.⁶ Most countries hence achieved or even surpassed their retention rates from before the pandemic. This again reflects the high overall panel stability (and commitment) of panel respondents in SHARE.

⁶ The numbers for the SHARE Corona Telephone Survey are based on respondents who had a positive probability to be reached by phone. Households without a telephone number available hence were not taken into account for the calculation of retention between Wave 8 and the 1st SCS. This applied to about eight percent of the eligible sample in the SCS.

Table 1: Wave-to-wave retention rates of all Wave 1 (2004) samples by country

Country	Retention (Wave 1-2)	Retention (Wave 2-3)	Retention (Wave 3-4)	Retention (Wave 4-5)	Retention (Wave 5-6)	Retention (Wave 6-7)	Retention (Wave 7-8)	Retention (Wave 8-SCS1)
Austria	74.3%	71.3%	74.7%	78.5%	81.5%	83.2%	47.2%	88.6%
Belgium	76.3%	83.9%	80.6%	84.4%	85.7%	88.5%	45.9%	89.4%
Denmark	77.0%	80.2%	85.2%	89.6%	88.3%	86.4%	67.5%	66.4%
France	67.0%	76.1%	82.4%	72.6%	71.2%	81.1%	73.6%	72.1%
Germany	55.1%	73.6%	77.6%	68.3%	89.5%	88.0%	75.2%	86.2%
Greece	86.3%	84.1%			76.1%	92.0%	63.3%	94.2%
Israel	75.6%			82.6%	74.7%	84.5%	48.3%	80.7%
Italy	71.5%	87.1%	84.8%	88.0%	89.3%	90.6%	59.3%	90.8%
Netherlands	62.3%	75.0%	78.9%	85.2%	47.3%	72.6%	59.1%	79.9%
Spain	68.5%	83.3%	80.1%	89.2%	88.3%	86.3%	55.6%	86.5%
Sweden	70.6%	70.6%	73.4%	79.4%	85.2%	81.5%	70.4%	89.3%
Switzerland	74.6%	83.5%	87.0%	86.3%	89.4%	88.7%	82.2%	90.1%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 2: Wave-to-wave retention rates of all Wave 2 (2006) samples by country

Country	Retention (Wave 2-3)	Retention (Wave 3-4)	Retention (Wave 4-5)	Retention (Wave 5-6)	Retention (Wave 6-7)	Retention (Wave 7-8)	Retention (Wave 8-SCS1)
Belgium	76.8%	72.8%	80.8%	82.4%	81.5%	35.4%	87.8%
Czech Republic	65.9%	74.8%	85.8%	86.8%	89.9%	76.6%	77.0%
Denmark	78.5%	81.2%	90.0%	87.1%	89.8%	68.2%	68.0%
France	70.7%	75.8%	66.6%	70.9%	80.4%	67.2%	76.6%
Germany	58.4%	76.2%	71.4%	91.0%	88.0%	83.3%	87.4%
Greece	86.8%			73.0%	89.1%	76.9%	93.3%
Ireland	69.2%						
Israel			78.3%	86.4%	79.9%	40.6%	82.8%
Italy	72.0%	80.4%	80.8%	87.1%	81.1%	42.8%	87.3%
Netherlands	65.4%	76.9%	85.7%	50.2%	71.5%	52.5%	75.4%
Poland	73.5%	88.7%		85.8%	88.1%	57.7%	85.1%
Spain	74.5%	76.2%	88.4%	86.2%	86.9%	51.9%	81.8%
Sweden	39.3%	75.3%	76.3%	78.1%	80.9%	71.3%	77.2%
Switzerland	83.7%	88.9%	83.8%	89.4%	82.3%	80.2%	89.0%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.
The Swedish sample could not be entirely approached in Wave 3 but only in Wave 4.

Table 3: Wave-to-wave retention rates of all Wave 4 (2010) samples by country

Country	Retention (Wave 4-5)	Retention (Wave 5-6)	Retention (Wave 6-7)	Retention (Wave 7-8)	Retention (Wave 8-SCS1)
Austria	80.0%	81.6%	80.7%	49.0%	86.9%
Belgium	70.4%	79.4%	81.3%	43.6%	86.0%
Czech Republic	74.4%	84.0%	81.4%	60.0%	78.5%
Denmark	85.6%	84.8%	85.9%	59.9%	74.2%
Estonia	85.5%	84.6%	87.6%	63.0%	92.0%
France	69.6%	73.1%	77.6%	70.8%	72.2%
Hungary			58.5%	48.2%	66.1%
Italy	60.6%	82.2%	86.4%	41.1%	93.6%
Netherlands	76.7%	42.0%	74.5%	56.2%	65.7%
Portugal		80.4%	76.5%		
Slovenia	73.3%	85.4%	85.4%	69.1%	87.2%
Spain	82.7%	84.7%	81.7%	49.4%	78.0%
Switzerland	77.1%	85.7%	82.6%	76.4%	89.4%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 4: Wave-to-wave retention rates of all Wave 5 (2012) samples by country

Country	Retention (Wave 5-6)	Retention (Wave 6-7)	Retention (Wave 7-8)	Retention (Wave 8-SCS1)
Belgium	70.9%	78.6%	32.5%	84.7%
Czech Republic	75.7%	81.1%	64.3%	77.0%
Denmark	79.6%	83.3%	64.5%	71.5%
Germany	73.3%	83.2%	75.9%	83.9%
Israel	62.2%	75.6%	30.6%	84.4%
Italy	68.6%	84.3%	43.6%	91.0%
Luxembourg	69.6%	73.4%	68.6%	78.5%
Netherlands	38.4%	72.3%	56.1%	72.7%
Slovenia	80.9%	84.3%	64.5%	90.1%
Spain	77.1%	77.5%	35.1%	
Sweden	76.4%	79.1%	71.3%	89.7%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 5: Wave-to-wave retention rates of all Wave 6 (2014) samples by country

Country	Retention (Wave 6-7)	Retention (Wave 7-8)	Retention (Wave 8-SCS1)
Belgium	70.4%	35.6%	84.6%
Croatia	84.6%	53.5%	94.3%
Denmark	81.0%	51.0%	55.7%
Estonia	82.2%	44.7%	91.3%
France	64.9%	58.4%	68.4%
Greece	82.8%	67.7%	91.4%
Italy	62.1%	42.2%	88.5%
Luxembourg	65.1%	69.7%	79.4%
Netherlands	78.5%		
Poland	74.8%	42.0%	87.5%
Slovenia	82.9%	62.2%	88.9%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode; therefore, the Wave 6 baseline sample was not fielded in future waves.

Table 6: Wave-to-wave retention rates of all Wave 7 (2016) samples by country

Country	Retention (Wave 7-8)	Retention (Wave 8-SCS1)
Bulgaria	48.2%	77.2%
Croatia	29.8%	94.1%
Cyprus	42.8%	74.3%
Finland	56.7%	89.0%
Israel	22.4%	90.6%
Latvia	45.3%	88.8%
Lithuania	71.4%	79.4%
Malta	63.4%	86.5%
Poland	41.6%	82.5%
Romania	63.5%	92.5%
Slovakia	49.2%	88.1%

2.2 Wave-to-wave retention including recovery of former respondents

In addition to the previous subsection, the following tables show the wave-to-wave participatory behavior of respondents irrespectively of their former participation patterns. Respondents who missed one or more wave(s) but then re-joined SHARE are hence included here, which explains why some rates are higher than 100 percent. Again, it can be seen that the wave-to-wave retention including recovery increased remarkable over time in all countries – despite the evident drop caused by the stop of fieldwork due to the pandemic in Wave 8 – reflecting a very high overall panel stability after several waves. Other than that, the same considerations as in Subsection 2.1 apply with respect to comparisons between countries. To account for these differences between different countries and samples, we additionally calculated annualised retention rates that take gaps as well as the biennial interval between waves in SHARE into consideration⁷. As can be seen, these annualised rates are well beyond 90% in nearly all countries for the older samples and only fall behind with respect to the newly recruited samples (see last column of the following tables in this subsection), which obviously suffered most from the COVID-19-related suspension of fieldwork. With regard to the Netherlands a further aspect is important: While retention including recovery dropped between Wave 5 and Wave 6 when data collection had to be changed from face-to-face to web, it was particularly high for the transition between Wave 7 and Wave 8, despite the suspension of fieldwork. One plausible explanation for this finding is that older respondents not willing or able to participate online in Waves 6 and 7 could be recovered when it was possible again to conduct the survey face-to-face in Wave 8. However, the finding that retention including recovery in the second online interview in Wave 7 was already rather high might also reflect differences in respondents' preferences regarding the mode of data collection (online versus face-to-face). Obviously, the aim to get respondents back in the study who dropped out in Wave 6 was well achieved – even in a self-completion mode. This is an interesting finding that should be analysed further (e.g. with regard to predictive respondent characteristics) to better evaluate the possibilities of a mixed-mode design in SHARE in the future.

⁷ To calculate the annualised retention rate (incl. recovery), we used the following formula:

$\prod_k^l retention\ rate_s^{1/n}$, where n is the number of years between the first (k) and the last (l) participation of a country sample s in SHARE.

Table 7: Wave-to-wave retention rates incl. recovery of all Wave 1 (2004) samples by country

Country	Retention plus recovery (Wave 1-2)	Retention plus recovery (Wave 2-3)	Retention plus recovery (Wave 3-4)	Retention plus recovery (Wave 4-5)	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)	Retention plus recovery (annualised)
Austria	74.3%	81.9%	84.1%	102.5%	97.2%	91.2%	54.0%	98.6%	91.5%
Belgium	76.3%	91.5%	86.1%	94.3%	93.7%	93.6%	47.9%	85.8%	90.7%
Denmark	77.0%	88.0%	94.8%	103.7%	98.8%	93.3%	71.8%	76.8%	92.6%
France	67.0%	89.8%	95.4%	89.3%	83.1%	92.4%	82.5%	68.4%	91.1%
Germany	55.1%	81.3%	86.8%	74.4%	91.1%	90.5%	77.3%	75.0%	87.0%
Greece	86.3%	95.2%			85.8%	105.2%	65.8%	85.2%	94.4%
Israel	75.6%			91.1%	85.3%	107.1%	54.8%	85.1%	92.3%
Italy	71.5%	92.6%	89.0%	103.9%	101.5%	98.5%	61.4%	90.2%	93.4%
Netherlands	62.3%	90.8%	90.1%	94.5%	56.9%	94.7%	100.7%	104.5%	92.1%
Spain	68.5%	96.9%	90.6%	108.1%	101.1%	93.1%	58.8%	90.6%	92.9%
Sweden	70.6%	81.5%	96.5%	108.4%	102.0%	85.7%	77.3%	64.2%	90.0%
Switzerland	74.6%	87.9%	89.5%	86.8%	98.2%	91.9%	84.1%	82.4%	92.8%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 8: Wave-to-wave retention rates incl. recovery of all Wave 2 (2006) samples by country

Country	Retention plus recovery (Wave 2-3)	Retention plus recovery (Wave 3-4)	Retention plus recovery (Wave 4-5)	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)	Retention plus recovery (annualised)
Belgium	76.8%	75.7%	92.9%	97.9%	85.2%	37.2%	84.1%	86.9%
Czech Republic	65.9%	77.7%	94.5%	95.8%	96.4%	79.9%	67.7%	90.2%
Denmark	78.5%	86.4%	107.3%	91.6%	94.4%	71.5%	73.8%	91.6%
France	70.7%	87.1%	79.8%	84.6%	95.5%	72.7%	72.0%	89.3%
Germany	58.4%	86.0%	75.2%	92.1%	88.6%	84.8%	76.4%	88.0%
Greece	86.8%			79.0%	98.1%	80.3%	88.7%	95.0%
Ireland	69.2%							83.2%
Israel			78.3%	104.0%	85.3%	47.0%	83.7%	91.2%
Italy	72.0%	84.7%	95.1%	103.0%	90.7%	47.3%	91.0%	90.1%
Netherlands	65.4%	88.3%	94.3%	61.9%	89.4%	91.6%	89.0%	90.2%
Poland	73.5%	95.6%		94.7%	92.1%	59.7%	78.6%	91.7%
Spain	74.5%	87.0%	105.8%	97.8%	92.4%	54.2%	87.7%	91.5%
Sweden	39.8%	107.2%	97.4%	96.4%	86.8%	77.8%	57.1%	86.1%
Switzerland	83.7%	91.2%	84.0%	95.7%	85.8%	85.6%	82.8%	93.4%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.
The Swedish sample could not be entirely approached in Wave 3 but only in Wave 4.

Table 9: Wave-to-wave retention rates incl. recovery of all Wave 4 (2010) samples by country

Country	Retention plus recovery (Wave 4-5)	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)	Retention plus recovery (annualised)
Austria	80.0%	88.2%	87.2%	52.6%	95.2%	88.6%
Belgium	70.4%	89.9%	89.1%	45.7%	89.7%	86.8%
Czech Republic	74.4%	93.7%	91.0%	65.5%	65.6%	87.2%
Denmark	85.6%	86.1%	92.1%	62.1%	76.8%	88.2%
Estonia	85.5%	92.4%	98.4%	67.1%	96.5%	93.1%
France	69.6%	80.5%	88.7%	78.6%	68.1%	87.7%
Hungary			58.5%	57.6%	83.2%	87.9%
Italy	60.6%	95.3%	100.2%	43.0%	98.9%	87.2%
Netherlands	76.7%	46.6%	97.3%	103.0%	131.3%	92.5%
Portugal		80.4%	81.2%		105.1%	96.2%
Slovenia	73.3%	98.6%	92.3%	74.3%	89.9%	92.4%
Spain	82.7%	93.1%	90.5%	54.1%	92.3%	89.9%
Switzerland	77.1%	92.1%	87.5%	81.3%	79.6%	91.2%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 10: Wave-to-wave retention rates incl. recovery of all Wave 5 (2012) samples by country

Country	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)	Retention plus recovery (annualised)
Belgium	70.9%	87.2%	33.7%	93.1%	82.0%
Czech Republic	75.7%	88.7%	69.7%	67.7%	85.9%
Denmark	79.6%	88.3%	69.0%	78.2%	87.5%
Germany	73.3%	87.6%	78.0%	76.8%	87.3%
Israel	62.2%	96.6%	36.4%	91.2%	81.0%
Italy	68.6%	97.0%	45.2%	99.5%	86.4%
Luxembourg	69.6%	81.6%	75.4%	73.6%	87.1%
Netherlands	38.4%	95.5%	103.7%	113.0%	90.3%
Slovenia	80.9%	88.2%	69.4%	100.0%	91.9%
Spain	77.1%	89.5%	38.7%		80.3%
Sweden	76.4%	84.3%	78.9%	72.2%	86.8%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 11: Wave-to-wave retention rates incl. recovery of all Wave 6 (2014) samples by country

Country	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)	Retention plus recovery (annualised)
Belgium	70.4%	37.4%	93.0%	80.4%
Croatia	84.6%	56.4%	95.0%	88.4%
Denmark	81.0%	53.9%	66.5%	80.1%
Estonia	82.2%	46.2%	101.5%	85.7%
France	64.9%	62.6%	62.7%	80.7%
Greece	82.8%	70.5%	82.8%	88.4%
Italy	62.1%	44.9%	91.5%	80.6%
Luxembourg	65.1%	76.7%	79.4%	86.8%
Netherlands	78.5%			
Poland	74.8%	43.3%	83.0%	82.3%
Slovenia	82.9%	66.0%	93.4%	90.1%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode; therefore, the Wave 6 baseline sample was not fielded in future waves.

Table 12: Wave-to-wave retention rates incl. recovery of all Wave 7 (2016) samples by country

Country	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)	Retention plus recovery (annualised)
Bulgaria	48.2%	50.3%	73.6%
Croatia	29.8%	87.1%	73.9%
Cyprus	42.8%	71.6%	75.6%
Finland	56.7%	73.0%	81.7%
Israel	22.4%	58.5%	62.7%
Latvia	45.3%	63.8%	77.4%
Lithuania	71.4%	69.7%	86.6%
Malta	63.4%	75.7%	84.4%
Poland	41.6%	70.5%	77.3%
Romania	63.5%	83.1%	87.6%
Slovakia	49.2%	47.7%	74.3%

2.3 Wave-to-wave retention including recovery of former respondents and new/missing partners

SHARE explores not only the original samples in each participating country from the first wave on, but also household members that enter the survey at later points in time, for example, when eligible persons move into SHARE households or partners do not participate from the beginning. The following tables hence present the wave-to-wave participatory behavior of respondents including recovery as well as new/missing partners and thus provide additional information about the sample size development in SHARE. Again, retention stabilised after few

waves at a very high level, indicating that the survey succeeded in keeping respondents participating over a remarkable long time despite their, on average, advanced age. Further, the same restrictions as in Subsections 2.1 and 2.2 should be taken into account when comparing rates across countries and samples.

Table 13: Wave-to-wave retention rates incl. recovery and new/missing partners of all Wave 1 (2004) samples by country

Country	Retention plus recovery (Wave 1-2)	Retention plus recovery (Wave 2-3)	Retention plus recovery (Wave 3-4)	Retention plus recovery (Wave 4-5)	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)
Austria	78.9%	87.4%	85.6%	103.7%	97.9%	91.7%	54.4%	99.4%
Belgium	78.7%	93.2%	86.6%	94.8%	94.1%	93.8%	48.0%	86.1%
Denmark	80.1%	88.9%	95.7%	103.9%	99.4%	93.3%	72.1%	76.8%
France	68.7%	91.5%	96.4%	90.0%	83.7%	92.5%	82.8%	68.8%
Germany	59.4%	83.1%	87.3%	75.2%	91.6%	91.1%	77.3%	75.5%
Greece	87.2%	97.7%			86.2%	105.6%	65.8%	85.5%
Israel	89.9%			94.5%	86.5%	107.6%	55.2%	86.1%
Italy	80.0%	94.9%	89.9%	107.1%	103.1%	98.8%	61.6%	90.8%
Netherlands	66.4%	93.6%	92.3%	95.3%	57.4%	95.6%	101.5%	104.5%
Spain	90.2%	103.7%	92.6%	109.8%	102.0%	93.2%	59.0%	91.0%
Sweden	76.3%	83.9%	98.9%	110.5%	103.2%	86.0%	77.6%	64.2%
Switzerland	79.0%	89.8%	91.0%	87.5%	98.6%	92.4%	84.6%	83.1%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 14: Wave-to-wave retention rates incl. recovery and new/missing partners of all Wave 2 (2006) samples by country

Country	Retention plus recovery (Wave 2-3)	Retention plus recovery (Wave 3-4)	Retention plus recovery (Wave 4-5)	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)
Belgium	79.0%	78.2%	94.2%	97.9%	85.2%	37.2%	84.1%
Czech Republic	68.8%	79.8%	95.0%	96.5%	96.6%	80.0%	67.7%
Denmark	81.1%	88.0%	108.5%	92.4%	94.6%	71.8%	74.0%
France	77.9%	89.9%	81.6%	86.3%	95.7%	72.7%	72.3%
Germany	61.1%	87.2%	78.7%	94.1%	88.9%	84.8%	76.4%
Greece	87.4%			79.3%	98.4%	80.5%	88.7%
Ireland	86.1%						
Israel			80.8%	104.6%	85.3%	47.5%	83.7%
Italy	73.8%	85.7%	98.8%	103.6%	90.7%	47.7%	93.0%
Netherlands	71.2%	90.8%	98.1%	63.5%	93.0%	92.7%	89.0%
Poland	82.4%	97.9%		95.6%	92.4%	59.8%	78.7%
Spain	79.9%	88.0%	108.4%	97.8%	93.2%	54.2%	87.7%
Sweden	43.9%	115.7%	104.1%	98.2%	87.8%	78.5%	57.1%
Switzerland	90.5%	94.3%	84.7%	96.5%	86.9%	86.7%	84.9%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

The Swedish sample could not be entirely approached in Wave 3 but only in Wave 4.

Table 15: Wave-to-wave retention rates incl. recovery and new/missing partners of all Wave 4 (2010) samples by country

Country	Retention plus recovery (Wave 4-5)	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)
Austria	83.6%	89.4%	88.0%	52.8%	96.2%
Belgium	72.9%	91.4%	90.4%	46.0%	90.6%
Czech Republic	78.1%	95.4%	92.5%	66.0%	65.7%
Denmark	89.0%	87.9%	93.5%	62.1%	77.5%
Estonia	88.6%	93.2%	98.8%	67.3%	96.8%
France	74.2%	82.6%	89.4%	78.7%	68.3%
Hungary			59.8%	58.4%	84.7%
Italy	65.4%	98.8%	101.3%	43.2%	99.9%
Netherlands	81.1%	48.5%	100.7%	105.7%	131.3%
Portugal		88.9%	81.8%		105.6%
Slovenia	82.3%	105.6%	94.4%	75.3%	91.6%
Spain	86.1%	93.9%	91.0%	54.3%	93.1%
Switzerland	80.5%	93.8%	88.3%	82.0%	81.2%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 16: Wave-to-wave retention rates incl. recovery and new/missing partners of all Wave 5 (2012) samples by country

Country	Retention plus recovery (Wave 5-6)	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)
Belgium	74.7%	88.5%	34.0%	94.0%
Czech Republic	79.0%	89.7%	70.2%	67.7%
Denmark	81.4%	89.5%	69.8%	78.7%
Germany	74.8%	89.1%	78.3%	77.3%
Israel	65.5%	100.6%	37.3%	92.8%
Italy	71.3%	98.2%	45.5%	101.3%
Luxembourg	72.7%	86.7%	77.1%	76.5%
Netherlands	41.2%	100.7%	108.5%	113.0%
Slovenia	92.1%	91.2%	70.9%	102.4%
Spain	82.0%	90.5%	38.8%	
Sweden	79.9%	85.2%	80.1%	72.2%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode.

Table 17: Wave-to-wave retention rates incl. recovery and new/missing partners of all Wave 6 (2014) samples by country

Country	Retention plus recovery (Wave 6-7)	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)
Belgium	73.0%	37.5%	95.6%
Croatia	86.7%	56.7%	96.1%
Denmark	83.1%	55.8%	68.2%
Estonia	86.2%	46.5%	104.1%
France	68.0%	64.0%	64.3%
Greece	86.0%	71.9%	82.8%
Italy	66.0%	45.4%	95.3%
Luxembourg	69.7%	81.2%	84.7%
Netherlands	83.7%		
Poland	81.1%	44.4%	83.7%
Slovenia	88.1%	67.6%	96.4%

Note: The interviews in the Netherlands in Waves 6 and 7 were conducted in a different mode; therefore, the Wave 6 baseline sample was not fielded in future waves.

Table 18: Wave-to-wave retention rates incl. recovery and new/missing partners of all Wave 7 (2016) samples by country

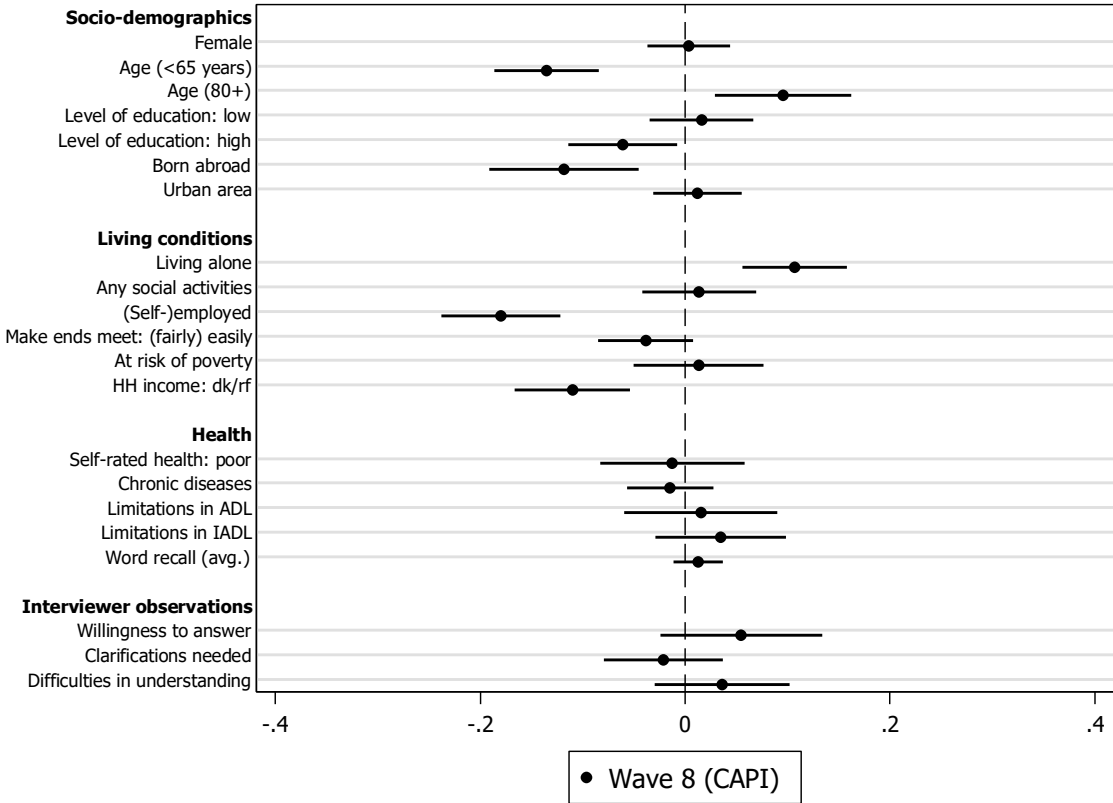
Country	Retention plus recovery (Wave 7-8)	Retention plus recovery (Wave 8-SCS1)
Bulgaria	49.1%	50.5%
Croatia	30.9%	93.8%
Cyprus	45.9%	76.0%
Finland	58.5%	77.2%
Israel	23.0%	62.3%
Latvia	47.8%	65.4%
Lithuania	75.2%	71.8%
Malta	66.5%	76.8%
Poland	43.4%	72.2%
Romania	65.5%	85.3%
Slovakia	50.2%	47.8%

2.4 Assessing the quality of the suspended data collection in SHARE Wave 8

The previous subsections showed a lower retention in the panel samples in Wave 8 due to the suspension of face-to-face fieldwork in March 2020 caused by the outbreak of COVID-19. This lower retention raises the question whether the representativeness of the panel sample is affected and if yes to what degree. Therefore, it is crucial to assess carefully the quality of the regular Wave 8 data. In the following, we investigate predictors for attrition to uncover clues about selective participation in SHARE. We used logistic regression models for all respondents who participated in the (pre-pandemic) Wave 7. While the dependent variable measured

participation in the suspended face-to-face data collection in Wave 8, the independent variables stemmed from Wave 7 to analyse pathways of the panel respondents. Figure 3 illustrates the average marginal effects (AMEs), using a broad range of information on respondents' socio-demographic characteristics, living conditions and health-related outcomes, as well as interviewer observations from Wave 7. Stable characteristics (e.g. on respondents highest school degree) have been carried forward to avoid a loss of information.

Figure 3: Average marginal effects (AMEs) for participation in Wave 8



Data: SHARE Wave 8, release 8-0-0 (n=55,958). Displayed are average marginal effects (AMEs) with 95%-confidence intervals.

Overall, the most striking result was that many relevant characteristics were not significantly correlated with a participation in Wave 8. This was particularly true with regard to respondents' health conditions, but also many other indicators. When looking closer, it can be seen that younger respondents below 65 years, higher educated, those born abroad, (self-)employed, and those denying a substantial answer on their household income had a significantly lower probability to participate in the regular Wave 8 face-to-face survey. In contrast, very old respondents aged 80 years and above and those living alone had a significantly higher

probability to participate in Wave 8. Previous research (Bergmann & Scherpenzeel, 2020) showed that younger, still working respondents are harder to contact due to their limited time resources. Usually, interviewers then need more contact attempts and appointments to realise a successful interview. Older respondents, contrarily, who more frequently are living alone due to the deaths of the partner, can be reached more easily – at least when they do not severely suffer from physical and/or cognitive conditions.

The pattern in Figure 3 thus plausibly reflects the fact that easier to reach respondents could still be interviewed before the suspension of fieldwork, while this was not the case for harder to reach persons as well as respondents with privacy concerns or lacking trust towards surveys asking questions about the economic situation, frequently perceived as a sensitive topic. However, it is important to stress that these significant (and in some cases substantial) differences mainly refer to socio-demographic characteristics, which are usually used as controls in regression models. In this sense, it is a good sign that health-related outcomes, which are frequently used in substantive analyses, were not significantly affected by selective (non-) response. The overall rather small differences between respondents and non-respondents, mostly ranging below ± 10 percentage points, were also reflected by the small proportion of explained variance, which accounted for only about eight percent. Moreover, this proportion decreased to less than one percent when not taking into account country differences, which were included in the model as dichotomous variables and accounted for the bulk of explained variance. Therefore, we would conclude that there is no clear evidence for severe selective bias due to the stop of fieldwork in Wave 8. We nonetheless advise a cautious approach when using the data, especially with respect to variables that showed some selectivity in Figure 3 above. This refers, for example, to the use of respondents' employment status as dependent variable. Similarly, we would advise to include respondent characteristics, such as having a migration background ("born abroad") or living alone, in addition to age and education as control variables in multivariate analyses.

2.5 End-of-life interviews by the respondents' partner or a close relative

SHARE requests interviewers to confirm the decease of a respondent by a proxy-respondent. In case of decease, interviewers try to conduct an end-of-life interview, which mainly contains information on the circumstances of death like time and cause of death. The proxy-respondent can be a family member, a household member, a neighbour or any other person of the closer

social network of the deceased respondent. Table 19 shows the number of end-of-life interviews that have been conducted in each longitudinal sample so far as well as the percentage of end-of-life interviews that could be realised from all deceased persons, whose death is validated by a proxy-respondent. Overall, end-of-life interviews could be realised for nearly three out of four deceased panel participants. This number was slightly lower than after Wave 7, partly reflecting the greater caution interviewers exercised with respect to more recent deaths due to COVID-19 in summer 2020 before a vaccine was approved. Further, due to the lack of a national mortality register (or other frequently updated administrative records) in most European countries, we could not ascertain the vital status of non-respondents who dropped out of the SHARE sample because they did not consent to be re-interviewed or – despite all efforts of our interviewers – could not successfully be re-contacted. We are trying to convince national statistical offices to generate data that are more accurate but this is a long-term process. Until data from mortality registers or similar records are available, SHARE has to classify the vital status of non-respondents without any further information from a proxy as “unknown”. As a consequence, the number of cases with unknown vital status is larger in SHARE than in other studies, where a central mortality register is available, such as the Health and Retirement Study (HRS) or the Household, Income and Labour Dynamics in Australia (HILDA) Survey.

Table 19: End-of-life interviews by country and sample

Country	Sampling wave	Number of end-of-life interviews	Percentage of end-of-life interviews from validated deceased persons
Austria	1	349	70.4%
Austria	4	446	67.5%
Belgium	1	630	70.2%
Belgium	2	28	65.1%
Belgium	4	275	56.4%
Belgium	5	71	48.6%
Belgium	6	25	32.9%
Bulgaria	7	88	69.3%
Croatia	6	238	73.7%
Croatia	7	15	48.4%
Cyprus	7	36	60.0%
Czech Republic	2	456	80.1%
Czech Republic	4	636	75.8%
Czech Republic	5	149	79.3%
Denmark	1	474	71.5%
Denmark	2	245	67.7%
Denmark	4	8	66.7%
Denmark	5	162	64.3%
Denmark	6	2	33.3%
Estonia	4	1527	76.2%
Estonia	6	10	43.5%
Finland	7	25	47.2%

France	1	495	59.4%
France	2	86	53.4%
France	4	281	52.5%
France	6	2	33.3%
Germany	1	252	46.3%
Germany	2	61	38.9%
Germany	5	261	49.4%
Greece	1	793	91.3%
Greece	2	138	76.2%
Greece	6	160	68.1%
Hungary	4	477	70.1%
Ireland	2	36	54.5%
Israel	1	664	87.5%
Israel	2	110	88.0%
Israel	5	11	55.0%
Israel	7	5	83.3%
Italy	1	611	76.4%
Italy	2	155	71.4%
Italy	4	157	80.1%
Italy	5	123	65.1%
Italy	6	31	62.0%
Latvia	7	42	56.0%
Lithuania	7	101	62.7%
Luxembourg	5	70	46.7%
Luxembourg	6	7	43.8%
Malta	7	35	68.6%
Netherlands	1	320	41.9%
Netherlands	2	55	38.7%
Netherlands	4	30	34.9%
Netherlands	5	52	27.1%
Netherlands	6	11	42.3%
Poland	2	666	70.9%
Poland	6	5	21.7%
Poland	7	133	60.7%
Portugal	4	283	69.2%
Romania	7	118	64.8%
Slovakia	7	43	86.0%
Slovenia	4	423	67.2%
Slovenia	5	76	66.7%
Slovenia	6	102	68.5%
Spain	1	930	77.5%
Spain	2	100	76.9%
Spain	4	312	82.3%
Spain	5	370	70.3%
Sweden	1	765	73.8%
Sweden	2	105	69.1%
Sweden	5	172	57.9%
Switzerland	1	139	74.3%
Switzerland	2	84	69.4%
Switzerland	4	202	66.0%
<i>Total</i>		<i>16555</i>	<i>70.8%</i>

Note: Average percentage of end-of-life interviews from validated deceased persons takes into account the number of conducted end-of-life interviews in each country sample.

References

- Bergmann, M., De Luca, G., & Scherpenzeel, A. (2017). Sampling design and weighting strategies in SHARE Wave 6. In A. Börsch-Supan & F. Malter (Eds.), *SHARE Wave 6: Panel innovations and collecting dried blood spots* (pp. 77-93). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Bergmann, M., Kneip, T., De Luca, G., & Scherpenzeel, A. (2019). *Survey participation in the Survey of Health, Ageing and Retirement in Europe (SHARE), Wave 1-7*. SHARE Working Paper Series 41-2019. Munich: Munich Center for the Economics of Aging (MEA).
- Bergmann, M., & Scherpenzeel, A. (2020). Using field monitoring strategies to improve panel sample representativeness: Application during data collection in the Survey of Health, Ageing and Retirement in Europe (SHARE). *Survey Methods: Insights from the Field (SMIF), Special Issue: 'Fieldwork Monitoring Strategies for Interviewer-Administered Surveys'*.
- Blom, A. G., & Schröder, M. (2011). Sample composition 4 years on: Retention in SHARE Wave 3. In M. Schröder (Ed.), *Retrospective data collection in the Survey of Health, Ageing and Retirement in Europe. SHARELIFE Methodology* (pp. 55-61). Mannheim: MEA.
- Börsch-Supan, A., Brandt, M., Hunkler, C., Kneip, T., Korbmayer, J., Malter, F., et al. (2013). Data resource profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). *International Journal of Epidemiology*, 42(4), 992-1001. doi: 10.1093/ije/dyt088.
- Das, M., De Bruijne, M., Janssen, J., & Kalwij, A. (2017). Experiment: Internet interviewing in the sixth wave of SHARE in the Netherlands. In F. Malter & A. Börsch-Supan (Eds.), *SHARE Wave 6: Panel innovations and collecting dried blood spots* (pp. 151-162). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- De Luca, G., Li Donni, P., & Rashidi, M. (2021). Weights and Imputations in SHARE Wave 8. In M. Bergmann & A. Börsch-Supan (Eds.), *SHARE Wave 8 Methodology: Collecting cross-national survey data in times of COVID-19* (pp. 133-145). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- De Luca, G., & Peracchi, F. (2005). Survey participation in the first wave of SHARE. In A. Börsch-Supan & H. Jürges (Eds.), *The Survey of Health, Ageing and Retirement in Europe - Methodology* (pp. 88-104). Mannheim: MEA.
- De Luca, G., & Rossetti, C. (2019). Weights and imputations. In M. Bergmann, A. Scherpenzeel & A. Börsch-Supan (Eds.), *SHARE Wave 7 Methodology: Panel innovations and life histories* (pp. 167-177). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Kneip, T. (2013). Survey participation in the fourth wave of SHARE. In F. Malter & A. Börsch-Supan (Eds.), *SHARE Wave 4: Innovations & Methodology* (pp. 140-155). Munich: MEA, Max-Planck-Institute for Social Law and Social Policy.
- Kneip, T., Malter, F., & Sand, G. (2015). Fieldwork monitoring and survey participation in fifth wave of SHARE. In F. Malter & A. Börsch-Supan (Eds.), *SHARE Wave 5: Innovations & Methodology* (pp. 102-159). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Malter, F. (2013). Fieldwork management and monitoring in SHARE Wave four. In F. Malter & A. Börsch-Supan (Eds.), *SHARE Wave 4: Innovations & Methodology* (pp. 124-139). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Malter, F., & Sand, G. (2017). Fieldwork monitoring and survey participation in sixth wave of SHARE. In F. Malter & A. Börsch-Supan (Eds.), *SHARE Wave 6: Panel innovations*

- and collecting dried blood spots* (pp. 95-125). Munich: MEA, Max-Planck-Institute for Social Law and Social Policy.
- Sand, G. (2019). Fieldwork monitoring and survey participation in the seventh wave of SHARE. In M. Bergmann, A. Scherpenzeel & A. Börsch-Supan (Eds.), *SHARE Wave 7 Methodology: Panel innovations and life histories* (pp. 109-153). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Sand, G. (2021). Fieldwork Monitoring and Survey Participation in the Regular SHARE Wave 8. In M. Bergmann & A. Börsch-Supan (Eds.), *SHARE Wave 8 Methodology: Collecting Cross-National Survey Data in Times of COVID-19* (pp. 67-124). Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Scherpenzeel, A., Axt, K., Bergmann, M., Douhou, S., Oepen, A., Sand, G., et al. (2020). Collecting survey data among the 50+ population during the COVID-19 pandemic: The Survey of Health, Ageing and Retirement in Europe (SHARE). *Survey Research Methods*, 14(2), 217-221. doi: 10.18148/srm/2020.v14i2.7738.

Appendix

Table 20: Sample Development in SHARE

Country	Sampling wave	Released main interviews									Released end-of-life interviews							
		Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	SCS 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	SCS 1
Austria	1	1559	1194	994	806	756	690	583	290	498	36	50	45	80	50	50	27	11
Austria	4				4328	3523	2633	2593	1279	2244				94	106	128	90	28
Belgium	1	3810	2960	2659	2218	2005	1784	1571	701	1254	40	99	86	97	102	102	53	51
Belgium	2		267	206	156	142	135	113	41	84		5	5	5	4	2	1	6
Belgium	4				2948	2099	1818	1581	695	1274				50	101	62	32	30
Belgium	5					1389	1017	873	287	690					20	27	10	14
Belgium	6						1060	762	280	617						12	6	7
Bulgaria	7							1998	907	879							75	13
Croatia	6						2495	2062	1092	1854						101	78	59
Croatia	7							346	102	295							5	10
Cyprus	7							1233	538	842							28	8
Czech Republic	2		2735	1816	1369	1201	1074	977	722	638		67	81	99	85	61	60	3
Czech Republic	4				4154	3119	2787	2406	1451	1526				124	190	173	136	13
Czech Republic	5					1315	990	829	543	554					49	59	39	2
Denmark	1	1706	1316	1105	983	934	831	717	497	424	50	65	74	87	97	58	20	23
Denmark	2		1314	1039	867	896	781	698	478	428		26	47	45	47	41	23	16
Denmark	4				437	388	340	314	194	219				1	1	4	1	1
Denmark	5					1928	1533	1311	885	857					36	61	30	35
Denmark	6						248	206	115	114								2
Estonia	4				6863	5751	4992	4565	2774	4111				331	368	369	299	160
Estonia	6						646	550	254	564						7	2	1
Finland	7							2007	1164	1502							10	15
France	1	3122	2087	1817	1666	1422	1138	979	761	627	59	92	85	78	52	74	50	5
France	2		903	683	598	474	398	366	256	248		20	16	14	11	15	10	
France	4				3586	2609	2095	1772	1329	1139				52	60	101	66	2
France	6						316	214	136	119						1	1	
Germany	1	2995	1728	1381	1164	847	756	664	487	487	52	55	41	28	20	25	26	5

Germany	2		900	537	455	355	325	282	223	211		13	13	3	9	7	16		
Germany	5					4548	3330	2874	2168	2135					70	94	83	14	
Greece	1	2897	2477	2289				1688	1584	943	1324	50	131		284	199	100	29	
Greece	2		933	801				569	523	403	460		14		66	37	18	3	
Greece	6							2667	963	1662	2074					36	112	12	
Hungary	4				3072			1538	781	1057						300	117	60	
Ireland	2		1035	855									36						
Israel	1	2449	2037			1760	1409	1414	689	1085	164			165	113	102	92	28	
Israel	2		411			302	278	219	87	157				30	38	18	17	7	
Israel	5					537	348	346	128	282					4	4	1	2	
Israel	7							152	32	64							3	2	
Italy	1	2551	1990	1814	1561	1572	1487	1371	790	1139	52	75	70	100	134	98	54	28	
Italy	2		990	714	590	558	546	463	205	402		17	22	25	32	32	16	11	
Italy	4				1417	900	843	812	330	726				27	46	42	21	21	
Italy	5					1709	1192	1118	489	986					27	53	20	23	
Italy	6						1237	804	356	672						12	9	10	
Latvia	7							1734	795	1056								33	9
Lithuania	7							2035	1437	1333								93	8
Luxembourg	5					1607	1150	963	727	727					18	34	15	3	
Luxembourg	6						413	287	228	237						1	5	1	
Malta	7							1261	806	913								32	3
Netherlands	1	2968	1922	1726	1539	1409	797	749	702	327	49	73	54	57	12	13	58	4	
Netherlands	2		761	532	476	452	284	261	226	82		10	7	15	3	3	16	1	
Netherlands	4				773	614	298	299	301	128				13		1	15	1	
Netherlands	5					1690	692	695	712	268					4	2	42	4	
Netherlands	6						2504	2086									11		
Poland	2		2466	1939	1733		1461	1240	664	857		94	165		195	110	78	24	
Poland	6						365	293	128	231						3	2		
Poland	7							3170	1287	2009							89	44	
Portugal	4				2013		1674	1282		1156					116	88		79	
Romania	7							2114	1282	1590								103	15
Slovakia	7							2077	999	971								43	
Slovenia	4				2748	2210	2234	1985	1389	1704				52	100	124	105	42	
Slovenia	5					748	667	581	393	547					22	27	19	8	

Slovenia	6						1322	1125	719	993						40	41	21
Spain	1	2316	1991	1939	1671	1669	1513	1276	691	1097	97	125	125	166	190	134	62	31
Spain	2		432	332	275	275	251	216	110	182		13	17	23	18	18	7	4
Spain	4				1781	1454	1284	1078	545	927				79	81	91	40	21
Spain	5					3295	2567	2134	783						136	188	46	
Sweden	1	3049	2262	1803	1627	1632	1570	1254	904	531	63	95	156	166	114	96	69	6
Sweden	2		534	158	342	333	304	261	185	91		6	26	23	23	6	20	1
Sweden	5					2590	2031	1681	1269	778					39	49	77	7
Switzerland	1	997	774	676	593	501	471	415	334	339	14	19	22	18	23	20	17	6
Switzerland	2		724	648	594	489	451	383	318	323		7	17	14	21	9	14	2
Switzerland	4				2597	2058	1881	1604	1255	1300				33	49	57	61	2
<i>Total</i>		<i>30419</i>	<i>37143</i>	<i>28463</i>	<i>58000</i>	<i>66065</i>	<i>72660</i>	<i>81292</i>	<i>46733</i>	<i>57559</i>	<i>726</i>	<i>1207</i>	<i>1174</i>	<i>2194</i>	<i>3386</i>	<i>3692</i>	<i>3059</i>	<i>1117</i>

Note: The column “sampling wave” indicates the various baseline/refreshment samples in each country. The sample size development of each baseline/refreshment sample (main and end-of-life interviews) is presented from left to right.