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SOEP-Core v41 – Sample Sizes and Panel Attrition in the German Socio-Economic Panel (SOEP) (Years 1984 to 2024)

Rainer Siegers, Hans Walter Steinhauer, and Felix Süttmann

DIW BERLIN

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Years 1984 to 2024

Rainer Siegers, Hans Walter Steinhauer, and Felix Süttmann

March 27, 2026

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Introduction

This data documentation provides a general overview of the longitudinal development of the Socio-Economic Panel (SOEP) over the past 41 years. It provides references to the derivation of weights that compensate for disproportional sampling probabilities, selective nonresponse in the first wave of each sample, as well as details on panel attrition.

In Chapter 1, we provide a structured description of each of the SOEP samples, including structured information about the underlying target population, sampling methodology, and initial fieldwork results. We also list references under the bullet point *Further readings* that provide more detailed information on sampling, fieldwork, and weighting in the first wave of each sample. Starting with the sampling design and the derivation of design weights, the documentations elaborate on unit nonresponse in the first wave in the panel due to unsuccessful contact and refusal to participate. Accordingly, adjustments of the design weights for nonresponse are presented as well as the marginal distributions used in the post-stratification step to adjust for possible sampling and coverage errors. The weights presented in these documentations form the basis for the weighting applied from the second wave onward. In 2024 the SOEP introduces new samples. Samples S and M8d and M10 are in their first wave. For this reason, the samples are not covered in Chapters 3 and 4. Please see the according documentation referred to in Chapter 1 under the bullet point *Further readings*.

In Chapter 2, we report the number of household and personal interviews for each year. We do so for the SOEP-Core covering the samples A, B, C, D, E, F, G, H, I, J, K, L1, L2, L3, N, O, P, Q, R, S, the IAB-SOEP Migration Samples consisting of M1, M2, M7, M8, M8b, M8c, M8d, M10, and the IAB-BAMF-SOEP Survey of Refugees samples with M3, M4, M5, M6, M9.

The SOEP surveys not only the original sample from the first wave, but also households and persons that entered the survey at later points in time. They enter, for example, when SOEP households split (i.e., individuals move out and form their own households), when people move into SOEP households, and when children are born into SOEP households, thereby becoming *new sample members*. For a detailed review of the SOEP inclusion rules for new sample units and their treatment within the weighting framework, see Spiess et al. (2008) and Schonlau, Watson, and Kroh (2011). Furthermore, we provide information on the longitudinal development of the SOEP and report descriptive figures of the participation behavior of original sample members, the entrance patterns of new sample members, and the development of the share of original households compared to new households resulting from household splits.

Households may leave the survey for several reasons. SOEP's weighting strategy distinguishes between survey-related reasons and reasons unrelated to the survey (for a detailed description of the SOEP weighting strategy, see Rendtel (1995) and Schonlau et al. (2013), and for a general overview, see Kara, Zimmermann, and SOEP-Group (2018)). We ignore panel attrition of the latter form due to respondents moving abroad or dying, since these cases technically represent an exit from the underlying population. We further provide initial evidence on the risk of survey-related panel attrition in different groups of the original sample units.

Chapter 3 reports in more detail on the occurrence of unsuccessful follow-ups to household addresses by survey year and sample, and regression models of the probability of unsuccessful follow-ups in 2024 based on the characteristics of households measured in 2023. Chapter 4 does the same for the second form of survey-related attrition: refusals. Documentation of panel attrition of previous waves can be obtained from the respective annual documentations (see, Appendix A.1 for links to previous versions).

Based on the regression models of unsuccessful follow-ups and refusals, we derive predicted probabilities. The inverse of the product of these predicted probabilities yields the longitudinal weighting factor (`hbleib` in `HPATHL` and `pbleib` in `PPATHL`) for the year 2024. The same can be found in the wide-format data sets `HHRF` and `PHRF` containing the variables `bohbleib` and `bopbleib`, accordingly. Based on the previous year's cross-sectional weight, the inverse probability of observing households and persons in 2023, and the staying probability in 2024, the cross-sectional weights are derived and subsequently adjusted through post-stratification to meet benchmarks of known margins of the underlying population in 2024. We derive the cross-sectional weights `hhrf` and `phrf` for `syear == 2024` in the data sets `HPATHL` and `PPATHL`. Accordingly, `bohhrf` and `bophrf` which can be found in `HHRF` and `PHRF` contain the same information in the wide format data sets.

Chapter 5 lists the margins used during the post-stratification process across different waves and samples. We cover margins used for SOEP-Core's samples together with the IAB-SOEP Migration Samples as well as those usd in the adjustment of the IAB-BAMF-SOEP Survey of Refugees samples. These samples cover specific sub-populations and required a modified selection and coding of the employed margins. Finally, Chapter 6 of this paper documents some summary statistics of the development of the longitudinal and the cross-sectional weights by sample and wave.

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1. Sampling of SOEP

The target population covered in the SOEP is defined as the population of private households residing within the boundaries of the Federal Republic of Germany as applicable at the time of each survey year. Because of changes in these boundaries (in 1990) and changes in the population due to migration, various adaptations have been made to the initial sampling structure to maintain the sample's representative character. In addition, certain groups have been oversampled to increase the precision of subgroup estimates.

1.1. SOEP-Core

The SOEP-Core is the main component of the German Socio-Economic Panel, a large longitudinal household survey that tracks individuals and families in Germany over time. It is run by the Socio-Economic Panel (SOEP) at the German Institute for Economic Research (DIW Berlin) and has been conducted annually since 1984. SOEP-Core is the central panel data set representing the resident population of Germany. It surveys private households and all individuals within them over many years. Participants are interviewed annually, allowing researchers to observe life trajectories and socioeconomic changes. The panel was launched to provide long-term data on social and economic conditions in Germany. It is designed to provide representative, longitudinal data on economic and living conditions, social dynamics, and individual life courses. Although it is the foundation of the SOEP certain subgroups of the population are too small to allow for generalizations. Therefor, the SOEP-Core is extended by additional specialized samples on migrants and refugees.

1.1.1. Key Facts

The following Table 1.1 details key facts on the samples of SOEP-Core such as the number of households in the initial sample (Gross) and in the panel (Net), response rates (RR = Net/Gross), number of persons in total (Persons), children (Children) and interviewers (Interviewer) in the the first wave, the number of primary sampling units (PSU), and some parameters of the initial weighting factors (minimum, mean, maximum and standard deviation).

Table 1.1.: Overview of Key Facts for the SOEP-Core Samples.

		Households			Individuals				Design Weights			
Sample	Year	Gross	Net	RR	Persons	Children	Interviewer	PSU	min	mean	max	sd
A	1984	7,730	4,528	0.59	11,422	2,296	592	581	3,358	5,491	11,041	1,402
B	1984	2,633	1,393	0.53	4,830	1,639	253	239	89	820	4,347	574
C	1990	2,179	1,981	0.91	6,131	1,589	215	330	367	3,103	19,102	1,734
D	1994	636	485	0.76	733	248	188	2	1,697	3,866	7,833	1,595
E	1998	2,033	999	0.49	2,446	463	130	125	14,809	35,568	204,381	18,204
F	2000	12,487	5,819	0.47	14,510	2,990	539	926	2,373	6,364	18,859	2,215
G	2002	5,663	1,162	0.21	3,538	693	270	1	983	2,084	9,757	953
H	2006	3,928	1,443	0.37	3,407	621	213	247	9,024	26,443	128,852	13,454
I	2009	4,964	1,587	0.32	3,428	620	221	243				
J	2011	9,804	3,014	0.31	6,873	1,148	295	304	1,968	12,596	49,167	6,158
K	2012	4,536	1,457	0.32	3,286	563	140	125	4,968	26,053	86,884	10,352
L1	2010	5,366	2,000	0.37	7,939	3,900	188	154	83	935	3,504	573
L2	2010	3,149	2,500	0.79	9,063	4,611	333	464	213	1,596	7,701	1,035
L3	2011	1,113	924	0.83	3,645	2,092	242	242	468	2,359	12,154	1,582
N	2017	2,807	2,230	0.79	5,665	1,037	249	243	1,816	14,016	131,832	10,805
O	2018	6,625	919	0.14	2,020	479	114	124	91	2,586	11,080	2,125
P	2019	23,259	1,941	0.08	5,199	1,060	205	249	18	322	2,548	291
Q	2019	835	475	0.57	813	69	178	1	582	3,157	12,734	2,192
R	2022	30,197	6,454	0.21	16,512	3,185	393	328	191	5,173	23,511	3,946
S	2024	42,509	5,314	0.13	12,646	2,137	665	328	615	7,537	69,653	5,635

1.1.2. A 1984 Initial Sample (West)

- Sample A "Residents in the Federal Republic of Germany" is one of the two initial samples of the SOEP and covers private households with a household head who does not belong to one of the main foreigner groups of "guest workers" (i.e. Turkish, Greek, Yugoslavian, Spanish or Italian households).
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design [1]
- Field Period: February to October 1984
- Initial Survey Mode: Paper-and-Pencil Interviewing (PAPI), option for self-completion
- Further readings (in German): Infratest Sozialforschung (2011a) *SOEP 1984 - Methodenbericht zum Befragungsjahr 1984 (Welle 1) des Sozio-oekonomischen Panels.* SOEP Survey Papers 1, DIW/SOEP, Berlin 2011.

1.1.3. B 1984 Migration (until 1983, West)

- Sample B "Foreigners in the Federal Republic of Germany" is one of the two initial Samples of the SOEP and covers private households with a Turkish, Greek, Yugoslavian, Spanish or Italian household head. Compared to Sample A, the population of Sample B is oversampled.
- Sampling Design: Multistage stratified sampling procedure using the registers of foreigners in each county (Ausländerregister der Landkreise)
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and number of foreigners of the respective nationality. Clustering of 241 PSUs (random selection of PSUs independent for each nationality)
- *Second Stage:* Random selection of addresses in each PSU (selected unit: person)
- Field Period: April to October 1984
- Initial Survey Mode: Paper-and-Pencil Interviewing (PAPI)

[1] ADM is the "Arbeitsgemeinschaft Deutscher Marktforschungsinstitute" (Working Group of the German Market Research Institutes). For more information, see https://www.adm-ev.de/en/services/the-adm-sampling-system/

- Further readings (in German): Infratest Sozialforschung (2011a) *SOEP 1984 - Methodenbericht zum Befragungsjahr 1984 (Welle 1) des Sozio-oekonomischen Panels.* SOEP Survey Papers 1, DIW/SOEP, Berlin 2011.

1.1.4. C 1990 Initial Sample (East)

- Sample C "German Residents in the German Democratic Republic (GDR)" covers persons in private households in which the household head was a citizen of the GDR.
- Sampling Design: Multistage stratified sampling procedure based on GDR-Master-Sample designed by Infratest in cooperation with the Department for Social Research of the Radio of the GDR[2]
- *First Stage:* Stratified by counties (NUTS 3) and municipality size. Clustering of 330 PSUs
- *Second Stage:* Random walk in each PSU with start addresses drawn from the central residents' data base (selected unit: household)
- Field Period: May to July 1990
- Initial Survey Mode: Paper-and-Pencil Interviewing (PAPI), option for self-completion
- Further readings (in German): Infratest Sozialforschung (2011b) *SOEP 1990/91 - Methodenbericht Ostdeutschland zu den Befragungsjahren 1990-1991 (Welle 1/2 - Ost) des Soziooekonomischen Panels.* SOEP Survey Papers 14, DIW/SOEP, Berlin 2011.

1.1.5. D 1994/1995 Migration (1984-1994, West)

- Sample D "Immigrants" covers private households in which at least one household member had moved from abroad to West Germany after 1984. This sample includes two subsamples that were drawn independently in 1994 (D1) and in 1995 (D2). The fieldwork organization sampled a small number of households of Sample D (N=98), using a respondent-driven sampling procedure. In these 98 cases, inclusion probabilities cannot be derived directly and we thus do not assign weights to these households.
- Sampling Design:
- *First Stage:* The migrant households were identified in representative surveys of the German population in 1992 (D1) and 1994 (D2).
- *Second Stage:* D1: Additional respondent-driven sampling units; D2: Random selection of households for two of the migrant groups (ethnic German immigrants from GDR and from Eastern Europe); selected unit: household
- Field Period: January to March 1994 (D1) and January to April 1995 (D2)
- Initial Survey Mode: Paper-and-Pencil Interviewing (PAPI), option for self-completion
- Further readings (in German):
- Infratest Sozialforschung (2011c) *SOEP 1994 - Methodenbericht Zuwanderer-Befragung (Teilstichprobe D1) zum Befragungsjahr 1994 (Welle 11) des Sozio-oekonomischen Panels.* SOEP Survey Papers 26, DIW/SOEP, Berlin.
- Infratest Sozialforschung (2011d) *SOEP 1995 - Methodenbericht Zuwanderer-Befragung II (Zweitbefragung D1, Erstbefragung D2) zum Befragungsjahr 1995 (Welle 12) des Sozio-oekonomischen Panels.* SOEP Survey Papers 28, DIW/SOEP, Berlin.
- Rendtel, Pannenberg, and Daschke (1997) *Die Gewichtung der Zuwanderer-Stichprobe des Sozio-oekonomischen Panels (SOEP).* In: Vierteljahrshefte zur Wirtschaftsforschung, Duncker & Humblot, Berlin, Vol. 66. No. 2, pp. 271-286..

[2] In German: *Abteilung Soziologische Forschung des Rundfunks der DDR.*

1.1.6. E 1998 Refreshment

- Sample E "Refreshment I" is the first sample that was designed to be representative for all private households in both East and West Germany. It is the first of several regular refreshment samples drawn to increase the overall size of the SOEP, compensate for panel attrition, and cover population changes, e.g. due to migration. It is also the first sample in which the Computer-Assisted Personal Interviewing (CAPI) was implemented. Interviews in Samples A-D at this time were exclusively conducted using Paper-and-Pencil Interviewing (PAPI). To study mode effects, households of Sample E were randomly allocated to CAPI and PAPI mode. With the 2012 data release, parts of Sample E were transferred to the SOEP Innovation Sample.
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and municipality size. Clustering of 125 PSUs
- *Second Stage:* Random walk in each PSU (selected unit: household)
- Field Period: April to September 1998
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI) and Paper-and-Pencil Interviewing (PAPI)
- Further readings:
- Infratest Sozialforschung (2011e) *SOEP 1998 - Methodenbericht Erstbefragung der Stichprobe E zum Befragungsjahr 1998 (Welle 15) des Soziooekonomischen Panels.* SOEP Survey Papers 33, DIW/SOEP, Berlin.
- Projektgruppe Das Sozio-oekonomische Panel (DIW) (1998) *Funktion und Design einer Ergänzungsstichprobe für das Sozio-oekonomische Panel (SOEP).* DIW Discussion Papers 163, Berlin.
- Schräpler, Schupp, and Wagner (2006) *Changing From PAPI to CAPI - A longitudinal Study of Mode Effects Based on an Experimental Design.* DIW Discussion Papers 593, Berlin.

1.1.7. F 2000 Refreshment

- Sample F "Refreshment II" covers private households in Germany and substantially increases the sample size of the SOEP. Experience with the previous samples has shown that migrant households display lower response probabilities. This is why households with at least one adult not having the German nationality were oversampled in Sample F.
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), counties (NUTS 3), and municipality size. Clustering of 985 PSUs
- *Second Stage:* Random walk in each PSU, oversampling of "non-German" households (selected unit: household)
- Field Period: March to October 2000
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI) and Paper-and-Pencil
- Further readings (in German): Infratest Sozialforschung (2011f) *SOEP 2000 - Methodenbericht erste Welle der SOEP Stichprobe F zum Befragungsjahr 2000 (Welle 17) des Soziooekonomischen Panels.* SOEP Survey Papers 37, DIW/SOEP, Berlin.

1.1.8. G 2002 High Income

- The 2002 Sample G "High Income" covers private households in Germany with a monthly income of at least DM 7,500 (EUR 3,835), which (due to the lack of an adequate sampling frame) were identified using a telephone screening procedure. From Wave 2 in 2003 onward, only households with a net monthly income of at least EUR 4,500 were interviewed further.
- Sampling Design: The households were selected from a representative telephone survey of the German population in 2001 that consists of nearly 99,000 telephone interviews.
- *First Stage:* Selection of the households with corresponding income from the master sample that agreed to participate in a following study
- *Second Stage:* Stratification according income and region (east/west)
- Field Period: March to July 2002
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI) and Paper-and-Pencil
- Further readings (in German):
- Infratest Sozialforschung (2011g) *SOEP 2002 - Methodenbericht Sondererhebung Hocheinkommensstichprobe zum Befragungsjahr 2002 (Welle 19) des Sozio-oekonomischen Panels.* SOEP Survey Papers 44, DIW/SOEP, Berlin.
- Infratest Sozialforschung (2011h) *SOEP 2003 - Methodenbericht zweite Welle der Sondererhebung Hocheinkommensstichprobe zum Befragungsjahr 2003 (Welle 20) des Sozio-oekonomischen Panels.* SOEP Survey Papers 47, DIW/SOEP, Berlin.

1.1.9. H 2006 Refreshment

- Sample H "Refreshment III" covers private households in Germany. For the first time in a SOEP subsample, all households were interviewed in the computer-assisted personal interview mode (CAPI).
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and municipality size. Clustering of 250 PSUs
- *Second Stage:* Random walk in each PSU (selected unit: household)
- Field Period: March to July 2006
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings (in German): TNS Infratest Sozialforschung (2011b) *SOEP 2006 - Methodenbericht Erstbefragung der Ergänzungsstichprobe H zum Befragungsjahr 2006 (Welle 23) des Sozio-oekonomischen Panels.* SOEP Survey Papers 57, DIW/SOEP, Berlin.

1.1.10. I 2009 Innovation Sample

- Sample I "Innovation Sample" covers private households in Germany. A disproportional sampling design was implemented in order to increase the number of migrant households in the SOEP. In order to do so, an analysis of family names (onomastic procedure) was applied. In 2012, Sample I was completely transferred to SOEP-IS, which is why it is excluded from the weighting scheme. The cases are nevertheless integrated in SOEP waves Z and BA (2009 and 2010), however, without valid weighting factors.
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and municipality size. Clustering of 250 PSUs
- *Second Stage:* Random walk for address listing in each PSU; oversampling of migrant households such that the share of migrants for each PSU is doubled (selected unit: household)
- Field Period: September 2009 to January 2010
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- TNS Infratest Sozialforschung (2012a) *SOEP 2009 - Methodenbericht Innovationssample zum Befragungsjahr 2009 (Welle 26) des Sozio-oekonomischen Panels (Erstbefragung Stichprobe I).* SOEP Survey Papers 73, DIW/SOEP, Berlin.
- M. Schröder et al. (2013) *Experimental Evidence of the Effect of Monetary Incentives on Cross-Sectional and Longitudinal Response: Experiences from the Socio-Economic Panel (SOEP).* SOEPpapers 603, DIW/SOEP, Berlin.
- Pforr et al. (2015) *Are Incentive Effects on Response Rates and Nonresponse Bias in Largescale, Face-to-face Surveys Generalizable to Germany? Evidence from Ten Experiments.* In: Public Opinion Quarterly, Vol. 79, No. 3, pp. 740–768.

1.1.11. J 2011 Refreshment

- Sample J "Refreshment IV" covers private households in Germany. Again, a disproportional sampling design was implemented in order to increase the number of migrant households in the SOEP.
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and municipality size. Clustering of 307 PSUs
- *Second Stage:* Random walk for address listing in each PSU; Oversampling of migrant households[3] such that the share of migrants for each PSU is doubled (selected unit: household)
- Field Period: March to October 2011
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- TNS Infratest Sozialforschung (2012b) *SOEP 2011 - Methodenbericht zum Befragungsjahr 2011 (Welle 28) des Sozio-oekonomischen Panels.* SOEP Survey Papers 108, DIW/SOEP, Berlin.
- Kroh, Käppner, and Kühne (2014) *Sampling, Nonresponse, and Weighting in the 2011 and 2012 Refreshment Samples J and K of the Socio-Economic Panel.* SOEP Survey Papers 260, DIW/SOEP, Berlin.

[3] Identification of potentially migrant households using onomastic procedure.

1.1.12. K 2012 Refreshment

- Sample K "Refreshment V" covers private households in Germany.
- Sampling Design: Multistage stratified sampling procedure based on the ADM-Design
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and municipality size. Clustering of 126 PSUs
- *Second Stage:* Random walk for address listing in each PSU (selected unit: household)
- Field Period: March to October 2012
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- TNS Infratest Sozialforschung (2013) *SOEP 2012 - Methodenbericht zum Befragungsjahr 2012 (Welle 29) des Sozio-oekonomischen Panels.* SOEP Survey Papers 144, DIW/SOEP, Berlin.
- Kroh, Käppner, and Kühne (2014) *Sampling, Nonresponse, and Weighting in the 2011 and 2012 Refreshment Samples J and K of the Socio-Economic Panel.* SOEP Survey Papers 260, DIW/SOEP, Berlin.

1.1.13. L1 2010 Birth Cohort (2007-2010)

- Sample L1 "Cohort Sample"[4], covers private households in Germany, in which at least one household member is a child that was born between January 2007 and March 2010. As in several other subsamples, migrants identified by an onomastic procedure are oversampled.
- Sampling Design: Multistage stratified sampling procedure based on information from local registration offices (Einwohnermeldeämter)
- *First Stage:* Stratified by federal states (NUTS 1), governmental regions (NUTS 2), and municipality size. Clustering of 159 PSUs
- *Second Stage:* Random selection of children in the respective cohort in each PSU provided by the local registration offices, stratified by municipality size; Oversampling of migrant households[5] such that the share of migrants for each PSU is doubled (selected unit: child in the respective cohort)
- Field Period: June to October 2010
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings (in German):
- TNS Infratest Sozialforschung (2011a) *"Familien in Deutschland" (FiD) 2010 Methodenbericht: Anlage und Ergebnisse der FiD-Stichproben.* TNS Infratest Sozialforschung, München.
- M. Schröder, Siegers, and Spieß (2013) *"Familien in Deutschland" - FiD.* In: Schmollers Jahrbuch, Vol. 133, No. 4, pp. 595-606.

[4]Sample L1, L2, and L3 were part of the SOEP-related study "Familien in Deutschland" (FiD), which was later integrated into the SOEP in 2014. As part of an evaluation project of the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ) and the Federal Ministry of Finance (BMF) the study focused on public benefits in Germany for married people and families. Therefore, the survey instruments of waves BA to BD differ in some parts from those of the other samples.

[5]Identification of potentially migrant addresses using onomastic procedure and information on the citizenship.

1.1.14. L2 2010 Family Type (Low-Income, Single-Parent, Large Families)

- Sample L2 "Family Types I" covers private households in Germany that meet at least one of the following criteria regarding their household composition: single parents, low income families and large families with three or more children. Similar to Sample G, we face the problem that the eligible sub-population is relatively small and an adequate sampling frame is lacking. As with Sample G, a preceding telephone screening procedure was used to identify eligible households.
- Sampling Design: Persons in potentially eligible households were identified in representative face-to-face and telephone surveys of the German population following the ADM-Design. Telephone screening (CATI-Screening) was then conducted in order to verify the eligibility and willingness of the households to participate. (selected unit: person)
- Field Period: March to June 2010
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings (in German):
- TNS Infratest Sozialforschung (2011a) *"Familien in Deutschland" (FiD) 2010 Methodenbericht: Anlage und Ergebnisse der FiD-Stichproben.* TNS Infratest Sozialforschung, München.
- M. Schröder, Siegers, and Spieß (2013) *"Familien in Deutschland" - FiD.* In: Schmollers Jahrbuch Vol. 133, No. 4, pp. 595-606.

1.1.15. L3 2011 Family Type (Single-Parent, Large Families)

- Sample L3 "Family Types II" covers private households in Germany that meet at least one of the following criteria regarding their household composition: single parents or large families with three or more children. It is conducted analogical to Sample L2 in order to increase the number of cases in these sub-populations.
- Sampling Design: Persons in potentially eligible households were identified in representative face-to-face and telephone surveys of the German population following the ADM-Design. Telephone screening (CATI-Screening) was then conducted to verify the eligibility and willingness of the households to participate. (selected unit: person)
- Field Period: March to June 2011
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings (in German):
- TNS Infratest Sozialforschung (2011a) *"Familien in Deutschland" (FiD) 2010 Methodenbericht: Anlage und Ergebnisse der FiD-Stichproben.* TNS Infratest Sozialforschung, München.
- M. Schröder, Siegers, and Spieß (2013) *"Familien in Deutschland" - FiD.* In: Schmollers Jahrbuch Vol. 133, No. 4, pp. 595-606.

1.1.16. N 2017 Refreshment (PIAAC-L)

- Participants of Sample N were initially drawn in the context of the international *Project in Assessment of Adult Skills and Competencies* (PIAAC) in 2012 that was initiated by the OECD[6]. The survey of the German subsample was carried out by GESIS and the target population of PIAAC 2012 Germany consisted of adults from age 16 through 65 that lived in Germany (on the reference date of 1 December 2011). The fieldwork in 2012 resulted in a net sample of 5,319 persons. Participants were then transferred into the PIAAC-L panel study[7], which followed the concept of "Anchor Persons", meaning that only original PIAAC sample members were followed in subsequent waves. The waves of PIAAC-L surveyed not only the PIAAC anchor persons, but other household members as well and already introduced items similar to those of the SOEP. The respective waves were conducted in the years 2014 (3,758 anchor interviews), 2015 (3,263) and 2016 (2,967), of which 2,811 anchor persons had agreed to be transferred into the SOEP. Finally, Sample N is based on respondents that took part in the last wave of PIAAC-L in 2016 and gave consent to be transferred into the SOEP.
- Sampling Design:[8] Two-staged stratified and clustered sampling procedure based on information from local registration offices (Einwohnermeldeämter)
- *First Stage:* Stratified by federal states, administrative regions, districts, and county type (rural/urban). Clustering of 277 PSUs
- *Second Stage:* systematic random sampling in each PSU (selected unit: person[9])
- Field Period: March to August 2017
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- Zabal et al. (2014) *PIAAC Germany 2012. Technical report.* Münster: Waxmann.
- OECD (2016) *Technical Report of the Survey of Adult Skills (PIAAC).* Paris, France: OECD
- Zabal, Martin, and Rammstedt (2016) *PIAAC-L data collection 2014: technical report; follow-up to PIAAC Germany 2012.* (GESIS Papers, 2016/17). Köln: GESIS - Leibniz-Institut für Sozialwissenschaften.
- Zabal, Martin, and Rammstedt (2017) *PIAAC-L data collection 2015: technical report.* (GESIS Papers 2017/29), Köln: GESIS - Leibniz-Institut für Sozialwissenschaften.
- Martin, Zabal, and Rammstedt (2018) *PIAAC-L data collection 2016: technical report.* (GESIS Papers 2018/05), Köln: GESIS - Leibniz-Institut für Sozialwissenschaften.

[6] A detailed description of the international PIAAC survey can be found in OECD (2016)

[7] For more detailed information on the respective waves please see the corresponding Technical Reports listed under *Further Readings*.

[8] The sampling design outlined here refers to the initial sample of PIAAC Germany in 2012.

[9] The households of the initially drawn persons for PIAAC 2012 provided the basis for PIAAC-L and Sample N, by also interviewing other household members, after giving their consent to participate.

1.1.17. O Social City (2018)

- Sample O is a refreshment sample that is aimed at evaluating the urban development and planning program "Soziale Stadt". The target population of Sample O consists of all households located in one of the "Soziale Stadt" areas. The corresponding households were sampled using spatially referenced data. Besides a novel sampling approach, the refreshment sample itself provides an additional data infrastructure for urban and regional planning and research.
- Sampling Design: Shape files restricting residential areas in which households were sampled as well as information about number and coordinates of buildings within these areas have been provided by the *Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)*.
- *First Stage:* Stratified by 20 regions (Federal states and population size) and clustered neighborhoods into PSUs.
- *Second Stage:* Within the PSUs buildings were randomly selected.
- *Third stage:* Within each of the selected buildings households were selected using the Kish selection grid.
- Field Period: March to August 2018
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: Steinhauer, Kroh, and Goebel (2020) *SOEP-Core – 2018: Sampling, Nonresponse, and Weighting in Sample O.* SOEP Survey Papers 827, DIW/SOEP, Berlin.

1.1.18. P 2019 Top-Shareholder

- Sample P "Top Shareholder Sample", covers households in Germany in which at least one household member belongs to the top percentile in terms of the estimated value of his or her cumulative company shareholdings.
- Sampling Design: Multistage stratified sampling design based on the global company database *ORBIS*, which was provided by the business information publisher *Bureau van Dijk (BvD)*.
- *First Stage:* Stratified by 24 regions (Federal states and population density) and clustered into 250 PSUs.
- *Second Stage:* Disproportional address sampling in each PSU according to age, sex, and estimated value of shareholdings (selected unit: person).
- Field Period: January 2019 to February 2020
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- C. Schröder et al. (2020) *Improving the Coverage of the Top-Wealth Population in the Socio-Economic Panel (SOEP).* SOEP Papers on Multidisciplinary Panel DataResearch 1114, DIW/SOEP, Berlin.
- Siegers, Steinhauer, and König (2021) *SOEP-Core – 2019: Sampling, Nonresponse, and Weighting in the Sample P.* SOEP Survey Papers 1080, DIW/SOEP, Berlin.

1.1.19. Q 2019 Lesbian-Gay-Bisexual (LGB) persons

- The 2019 boost Sample Q supplemented the SOEP-Core by queer households, including gender and sexual minorities such as lesbian, gay, bisexual, and trans* respondents. To recruit these households, a random telephone screening of adults living in Germany was conducted. Sample Q was funded by the Federal Ministry of Education and Research (BMBF).
- Sampling Design: Persons eligible to the target population were identified through nationwide omnibus surveys conducted by *Kantar Public*. A dual-frame method was used which makes it possible to also include respondents who only have a cell phone but not a landline. Subsequently, a telephone screening (CATI screening) was conducted to verify the eligibility and willingness of the target respondents (and their households) to participate.
- Field Period:
- September 2018 to August 2019 (telephone screening)
- April to November 2019 (interviews in households)
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: De Vries et al. (2021) *Design, Nonresponse, and Weighting in the 2019 Sample Q (Queer) of the Socio-Economic Panel.* SOEP Survey Papers 940, DIW/SOEP, Berlin.

1.1.20. R 2022 Refreshment

- The target population for the 2022 refreshment Sample R covers the general population in Germany aged 18 to 70 years living in private households. It includes an oversampling of the younger part of the population aged 18 to 45 years as well as as households located in lignite mining districts.
- Sampling Design:
- First stage: Stratification of municipalities by federal state and lignite mining districts, selection of municipalities, oversampling in lignite mining districts
- Second stage: Stratification by age groups 18 to 45 and 46 to 70 years of age, oversampling in age group 18 to 45
- Field Period: July 2022 to January 2023
- Initial Survey Mode: Mixed-mode design
- Further readings: Steinhauer, Siegers, et al. (2025) *SOEP-Core – 2022: Sampling, Nonresponse, and Weighting in Sample R.* SOEP Survey Papers 1496, DIW/SOEP, Berlin.

1.1.21. S 2024 Refreshment

- The target population for the 2024 refreshment Sample S covers the general population in Germany aged 18 years and older living in private households.
- Sampling Design:
- First stage: Stratification of municipalities by federal state, selection of municipalities
- Second stage: selection of persons from the population register
- Field Period: April to December 2024
- Initial Survey Mode: Mixed-mode design
- Further readings: Steinhauer, Siegers, et al. (2026b) *SOEP-Core – 2024: Sampling, Nonresponse, and Weighting in Sample S.* SOEP Survey Papers 1600, DIW/SOEP, Berlin.

1.2. IAB-SOEP Migration Sample

The IAB-SOEP Migration Samples are a set of longitudinal household survey samples designed to study migrants and their descendants and their integration in Germany. The study is conducted jointly by the Institute for Employment Research (Institut für Arbeitsmarkt- und Berufsforschung; IAB) and the Socio-Economic Panel (SOEP) atthe German Institute for Economic Research (DIW Berlin) and data has been collected annually since 2013. Earlier data sets in Germany had two main limitations. First, migrants were underrepresented in general population surveys and second, new migration waves after 1995 were poorly captured. The IAB-SOEP Migration Samples address this by oversampling migrants and new immigrant cohorts and by following them longitudinally. The samples significantly increase the number of migrants in the SOEP data, allowing more detailed analysis of migration processes in Germany. The primary focus is to study migration dynamics, integration processes, and labour-market outcomes over time.

1.2.1. Key Facts

The following Table 1.2 details key facts on the IAB-SOEP Migration Sample such as the number of households in the initial sample (Gross) and in the panel (Net), response rates (RR = Net/Gross), number of persons in total (Persons), children (Children) and interviewers (Interviewer) in the the first wave, the number of primary sampling units (PSU), and some parameters of the initial weighting factors (minimum, mean, maximum and standard deviation).

Table 1.2.: Overview of Key Facts for the IAB-SOEP-Migration Sample.

		Households			Individuals				Design Weights			
Sample	Year	Gross	Net	RR	Persons	Children	Interviewer	PSU	min	mean	max	sd
M1	2013	12,992	2,723	0.21	8,522	2,479	217	249	57	1,562	9,210	1,547
M2	2015	9,999	1,053	0.11	3,048	925	129	121	54	928	4,676	808
M7	2020	19,751	783	0.04	1,993	482	91	123	2	197	1,592	259
M8	2020	12,992	1,096	0.08	1,979	337	96	118	4	66	539	86
M8b	2022	20,647	2,300	0.11	4,321	491	227	85	2	34	1,211	50
M8c	2023	16,500	964	0.06	2,063	313	65	69	5	76	688	98
M8d	2024	7,430	348	0.05	645	73	38	86	16	205	1,485	203
M10	2024	33,287	2,128	0.06	5,330	1,164	545	309	19	1,048	10,672	1,154

1.2.2. M1 IAB-SOEP 2013 Migration (1995-2011)

- The 2013 "IAB-SOEP Migration Sample" (M1) was jointly planned and conducted by the Institute for Employment Research (IAB) in Nuremberg and the German Socio-Economic Panel (SOEP) at DIW Berlin. Register data of the Federal Employment Agency (FEA), the so-called Integrated Employment Biographies (IEB), were used as a sampling frame. The target population consists of individuals in the register as of December 31, 2011 who a) immigrated to Germany since 1995 as well as b) second-generation migrants born after 1976 in Germany.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratified by federal states (NUTS 1) and county type (urban/rural). Clustering of 250 PSUs proportional to number of migrants[10] in each stratum
- *Second Stage:* Simulated random walk algorithm in each PSU; disproportional address sampling according to country of origin and migration generation (selected unit: person)
- Field Period: May to November 2013
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- TNS Infratest Sozialforschung (2014) *Methodenbericht zum IAB-SOEP-Migrationssample 2013.* SOEP Survey Papers 217, DIW/SOEP, Berlin.
- Kroh et al. (2015) *The 2013 IAB-SOEP Migration Sample (M1): Sampling Design and Weighting Adjustment.* SOEP Survey Papers 271, DIW/SOEP, Berlin.
- Eisnecker et al. (2017) *The Request for Record Linkage in the IAB-SOEP Migration Sample.* SOEP Survey Papers 291, DIW/SOEP, Berlin.
- Eisnecker and Kroh (2017) *The Informed Consent to Record Linkage in Panel Studies: Optimal Starting Wave, Consent Refusals, and Subsequent Panel Attrition.* In: Public Opinion Quarterly, Vol. 81, No. 1, pp. 131-143.

1.2.3. M2 IAB-SOEP 2015 Migration (2009-2013)

- The 2015 "IAB-SOEP Migration Sample" (M2) aimed for the collection of information on households with recent migrants, that is, individuals who immigrated to Germany between 2009 and 2013. Similar to Sample M1, register data of the Federal Employment Agency (FEA) was used as a sampling frame.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratified by federal states (NUTS 1) and county type (urban/rural); proportion of migrants in each PSU. Clustering of 125 PSUs proportional to the number of target population members[11] in each stratum
- *Second Stage:* Disproportional address sampling in each PSU according to country of origin (selected unit: person)
- Field Period: May to December 2015
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: Kühne and Kroh (2017) *The 2015 IAB-SOEP Migration Study M2: Sampling Design, Nonresponse, and Weighting Adjustment.* SOEP Survey Papers 473, DIW/SOEP, Berlin.

[10] Identification of target persons using information on nationality, FEA measures and onomastic procedure.
[11] Identified by the year they entered the IEB and former and current citizenship.

1.2.4. M7 IAB-SOEP 2020 Migration

- The 2020 "IAB-SOEP Migration Sample" (M7) aimed for the collection of information on households with recent migrants from Poland, Romania, and Bulgaria between January 1st, 2016 and December 31st, 2018. Similar to Sample M1 and M2, register data of the *Federal Employment Agency (BA)* was used as a sampling frame.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratification: federal states (NUTS 1), county type (urban/rural); Clustering: 125 PSUs proportional to the number of target population members in each stratum
- *Second Stage:* Address sampling in each PSU according to country of origin (selected unit: person)
- Field Period: July 2020 to February 2021
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: Steinhauer, Trübswetter, and Zinn (2022) *SOEP-Core – 2020: Sampling, Nonresponse, and Weighting in the IAB-SOEP Migration Studies M7 and M8.* SOEP Survey Papers 1105, DIW/SOEP, Berlin.

1.2.5. M8 IAB-SOEP 2020 Migration Professionals

- The target population of Sample M8 consists of third-country nationals from outside the EU living in private households who were granted a permission to work in Germany as professionals in the time from January 1st, 2019 until January 30th, 2020. To sample from this population, we make use of the IEB data, which is official data provided by the IAB.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratification: federal states (NUTS 1), county type (urban/rural) ; Clustering: 125 PSUs proportional to the number of target population members in each stratum
- *Second Stage:* Address sampling in each PSU (selected unit: person)
- Field Period: July 2020 to February 2021
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: Steinhauer, Trübswetter, and Zinn (2022) *SOEP-Core – 2020: Sampling, Nonresponse, and Weighting in the IAB-SOEP Migration Studies M7 and M8.* SOEP Survey Papers 1105, DIW/SOEP, Berlin.

1.2.6. M8b IAB-SOEP 2022 Refreshment

- The target population of Sample M8b consists of skilled labor immigrants from non-EU countries for whom the Federal Agency for Employment (BA) granted permission to work in Germany between March 1, 2020, and October 30, 2021. To sample from this population, we make use of the IEB data, which is official data provided by the IAB.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratification: federal states (NUTS 1); Clustering: municipalities
- *Second Stage:* Address sampling in each PSU (selected unit: person)
- Field Period: August 2022 to January 2023
- Initial Survey Mode: Mixed-mode design
- Further readings: Steinhauer, Trübswetter, et al. (2025a) *IAB-SOEP-Migration – 2022: Sampling, Nonresponse, and Weighting in Sample M8b.* SOEP Survey Papers 1497, DIW/SOEP, Berlin.

1.2.7. M8c IAB-SOEP 2023 Refreshment

- The target population of Sample M8c consists households with persons from both the European Union (EU) and non-EU countries that show an employment spell for the first time in the integrated employment biographies (IEB) between November 1, 2021, and June 30, 2022.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratification: federal states (NUTS 1); Clustering: municipalities
- *Second Stage:* Address sampling in each PSU (selected unit: person)
- Field Period: July 2023 to December 2023
- Initial Survey Mode: Mixed-mode design
- Further readings: Steinhauer, Trübswetter, et al. (2025b) *IAB-SOEP-Migration – 2023: Sampling, Nonresponse, and Weighting of the Sample M8c.* SOEP Survey Papers 1536, DIW/SOEP, Berlin.

1.2.8. M8d IAB-SOEP 2024 Refreshment

- The target population for Sample M8d comprises households with persons from non-EU countries who received permission to work in Germany from the Federal Agency for Employment (BA) between May 15, 2023, and September 30, 2023.
- Sampling Design: Multistage stratified sampling design based on the IEB database
- *First Stage:* Stratification: federal states (NUTS 1); Clustering: municipalities
- *Second Stage:* Address sampling in each PSU (selected unit: person)
- Field Period: June to December 2024
- Initial Survey Mode: Mixed-mode design
- Further readings: Steinhauer, Trübswetter, et al. (2026) *IAB-SOEP-Migration – 2024: Sampling, Nonresponse, and Weighting of the Sample M8d.* SOEP Survey Papers 1602, DIW/SOEP, Berlin.

1.2.9. M10 IAB-SOEP 2024 Refreshment

- The target population for the IAB-SOEP Migration refreshment Sample M10 covers foreigners with an EU nationality aged 18 years and older living in private households in Germany.
- Sampling Design:
- First stage: Stratification of municipalities by federal state, selection of municipalities
- Second stage: selection of persons with an EU nationality from the population register
- Field Period: April to December 2024
- Initial Survey Mode: Mixed-mode design
- Further readings: Steinhauer, Siegers, et al. (2026a) *IAB-SOEP-Migration – 2024: Sampling, Nonresponse, and Weighting of the Sample M10.* SOEP Survey Papers 1601, DIW/SOEP, Berlin.

1.3. IAB-BAMF-SOEP Survey of Refugees

The IAB-BAMF-SOEP Survey of Refugees is a longitudinal household panel survey that studies the living conditions and integration of refugees who arrived in Germany. The survey is a joint project of the Institute for Employment Research (Institut für Arbeitsmarkt- und Berufsforschung; IAB), the Federal Office for Migration and Refugees (Bundesamt für Migration und Flüchtlinge; BAMF), and the Socio-Economic Panel (SOEP) at German Institute for Economic Research (DIW Berlin). The survey was launched in response to the large influx of refugees to Germany in 2015, which created major research and policy questions about integration and support policies. Existing datasets were limited in the sense that refugees were poorly represented in general household surveys and there was almost no longitudinal data on refugees' integration after their arrival in Germany. The survey draws its sample from administrative records of asylum applicants maintained by the Federal Office for Migration and Refugees. The survey therefore provides systematic, representative panel data on refugees, enabling long-term analysis of their experiences.

1.3.1. Key Facts

The following Table 1.3 details key facts on the IAB-BAMF-SOEP Refugee Sample such as the number of households in the initial sample (Gross) and in the panel (Net), response rates (RR = Net/Gross), number of persons in total (Persons), children (Children) and interviewers (Interviewer) in the the first wave, the number of primary sampling units (PSU), and some parameters of the initial weighting factors (minimum, mean, maximum and standard deviation).

Table 1.3.: Overview of Key Facts for the IAB-BAMF-SOEP-Refugee Sample.

		Households			Individuals				Design Weights			
Sample	Year	Gross	Net	RR	Persons	Children	Interviewer	PSU	min	mean	max	sd
M3	2016	14,829	1,712	0.12	4,609	1,665	71	100	10	187	4,132	212
M4	2016	10,799	1,673	0.15	6,737	3,497	71	93	6	96	1,532	114
M5	2017	5,390	1,455	0.27	4,771	1,828	30	99	5	146	2,404	180
M6	2020	3,000	1,141	0.38	3,177	1,208	50	131	5	510	12,429	863
M9	2023	33,766	4,809	0.14	13,977	4,653	287	97	2	126	2,037	146

1.3.2. M3 / M4 IAB-BAMF-SOEP 2016 Refugee (2013-2015)

- The 2016 "IAB-BAMF-SOEP Refugee Survey" (Samples M3 and M4) is a joint project of the Institute for Employment Research (IAB), the Research Centre of the Federal Office for Migration and Refugees (BAMF-FZ) as well as the Socio-Economic Panel (SOEP). The target population of the samples consists of households with individuals who arrived in Germany between January 2013 and January 2016 and applied for asylum or were hosted as part of specific programs of the federal states (irrespective of their asylum procedure and their current legal status). The first part of the sample (M3) was financed with funds from the research budget of the Federal Employment Agency (BA) allocated to the IAB. Sample M4 was funded by the Federal Ministry of Education and Research (BMBF) and has a focus on refugee families.
- Sampling Design: Multistage stratified sampling design based on the German Central Register of Foreigners (AZR)
- *First Stage:* Stratified by federal states (NUTS 1) and county type (urban/rural). Clustering of 99 PSUs (M3) / 95 PSUs (M4)
- *Second Stage:* Disproportional address sampling in each PSU according to country of origin, current legal status, age and gender (selected unit: person)
- Field Period: June to December 2016
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings:
- Kroh et al. (2016) *Das Studiendesign der IAB-BAMF-SOEP-Befragung von Geflüchteten.* SOEP Survey Papers 365, DIW/SOEP, Berlin.
- Kroh et al. (2017) *Sampling, Nonresponse, and Integrated Weighting of the 2016 IAB-BAMF-SOEP Survey of Refugees (M3/M4) – revised version.* SOEP Survey Papers 477, DIW/SOEP, Berlin.

1.3.3. M5 IAB-BAMF-SOEP 2017 Refugee (2013-2016)

- Sample M5 is both an enlargement and a refreshment of the former sub-samples M3 and M4 which are known as the IAB-BAMF-SOEP Survey of Refugees. Whereas the target population of M3 and M4 are all people that immigrated to Germany between January 2013 and January 2016 and appeared in the Central Register of Foreigners (AZR) up to April 2016, M5 adds two new aspects: First, people that immigrated to Germany between January 2013 and January 2016 and made a claim for asylum after April 2016 until January 2017 (refreshment) and, second, people who immigrated to Germany between February 2016 and December 2016 and making a claim for asylum until January 2017 (enlargement). The sampling is similar to sampling of M3 and M4 and we propose, for substantial analyses, to use all three sub-samples jointly. By using all sub-samples together they are representative for people immigrating to Germany and applied for asylum or people who were hosted as part of specific programs of the federal states (irrespective of their asylum procedure and their current legal status).
- Sampling Design: Multistage stratified sampling design based on the German Central Register of Foreigners (AZR)
- *First Stage:* Stratified by federal states (NUTS 1) and county type (urban/rural). Clustering of 99 PSUs
- *Second Stage:* Disproportional address sampling in each PSU according to country of origin, current legal status, gender, and target population (refreshment vs. enlargement, selected unit: person)
- Field Period: June to October 2017
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: Jacobsen et al. (2019) *Supplementary of the IAB-BAMF-SOEP Survey of Refugees in Germany (M5) 2017.* SOEP Survey Papers 605, DIW/SOEP, Berlin.

1.3.4. M6 IAB-BAMF-SOEP 2020 Refugee

- The 2020 boost Sample M6 supplemented the samples of the IAB-BAMF-SOEP Survey of Refugees by 1,141 households. To recruit these households, a random sample was drawn from the Central Register of foreigners. The Sample M6 consists of two main groups, namely persons who entered Germany between January 2013 up to the end of December 2016, filed an asylum application and whose last change of asylum status took place in 2013 to the end of 2016 (refreshment). The second group consists of persons who entered Germany between January 2013 and end of June 2019, filed an asylum application and whose last change of asylum status took place in 2017 to the end of June 2019 (enlargement).
- Sampling Design: Multistage stratified sampling design based on the *German Central Register of Foreigners (AZR)*
- *First Stage:* Stratification: refreshment and enlargement ; Clustering: 159 unique PSUs (100 per stratum)
- *Second Stage:* Sampling anchor persons within each PSU / stratum (selected unit: person)
- Field Period: August 2020 to February 2021
- Initial Survey Mode: Computer-Assisted Personal Interviewing (CAPI)
- Further readings: Steinhauer et al. (2022) *Sampling, Nonresponse, and Weighting of the 2020 Refreshment Sample (M6) of the IAB-BAMF-SOEP Refugee Panel.* SOEP Survey Papers 1104, DIW/SOEP, Berlin.

1.3.5. M9 IAB-BAMF-SOEP 2023 Refugee

- The 2023 boost Sample M9 supplemented the samples of the IAB-BAMF-SOEP Survey of Refugees. It consists of three subsamples: a refreshment Sample of refugees from all over the world (M9-ROW 2023) and two subsamples focusing on Ukrainian refugees. The first one focusing on Ukrainian refugees stems from the IAB-BiB/FReDA-BAMF-SOEP Survey of Refugees from Ukraine in Germany (M9-UKR 2022). The second is the refreshment sample (M9-UKR 2023).
- Sampling Design: Multistage stratified sampling design based on the *German Central Register of Foreigners (AZR)*
- *First Stage:* Stratification: federal states, Clustering: 190 unique PSUs
- *Second Stage:* Sampling anchor persons within each PSU (selected unit: person)
- Field Period: June to December 2023
- Initial Survey Mode: Mixed-mode design
- Further readings:
- Steinhauer et al. (2024) *Establishing a probability sample in a crisis context: the example of Ukrainian refugees in Germany in 2022.* In: AStA Wirtschafts- und Sozialstatistisches Archiv, Vol. 18, No. 1, pp. 77–97.
- Steinhauer, Siegert, et al. (2025) *IAB-BAMF-SOEP Survey of Refugees – 2023: Sampling, Nonresponse, and Weighting of the Sample M9.* SOEP Survey Papers 1537, DIW/SOEP, Berlin.

2. Developments in Sample Size

The following figures focus on comparing the number of successful interviews by cross-section. Section 2.1 details on the number of successful interviews on the household level and we show the number of successful person interviews in Section 2.2. Section 2.3 provides a longitudinal study of panel attrition among the original sample members. New sample members entering a household (by moving in or giving birth) are studied with respect to their participation behavior in more detail in Section 2.4. The Chapter closes with reports on the share of original households in relation to new households from splits in Section 2.5.

The sample sizes of the English public use version of SOEP and the German DIW version differ by approximately 5 percent. This percentage of the original SOEP data was randomly excluded in compliance with German data protection laws. This was technically accomplished by randomly selecting 5 percent of the first wave households and dropping these and the persons living in them from the English public-use version. Hence, the difference in sample sizes is not always exactly 5 percent.

Note that parts of Sample E as well as Sample I have been transferred to the SOEP Innovation Sample (SOEP-IS). For this reason these samples might look a bit odd in some of the tables and figures.

2.1. Household level

This Section provides details on the number of successfully surveyed households for SOEP-Core (Subsection 2.1.1), IAB-SOEP Migration Sample (Subsection 2.1.2), and IAB-BAMF-SOEP Survey of Refugees (Subsection 2.1.3).

2.1.1. SOEP-Core

Figure 2.1 provides a graphical illustration of the number of successful interviews on the household level by survey year and sample for SOEP-Core. Table 2.1 displays the specific numbers.

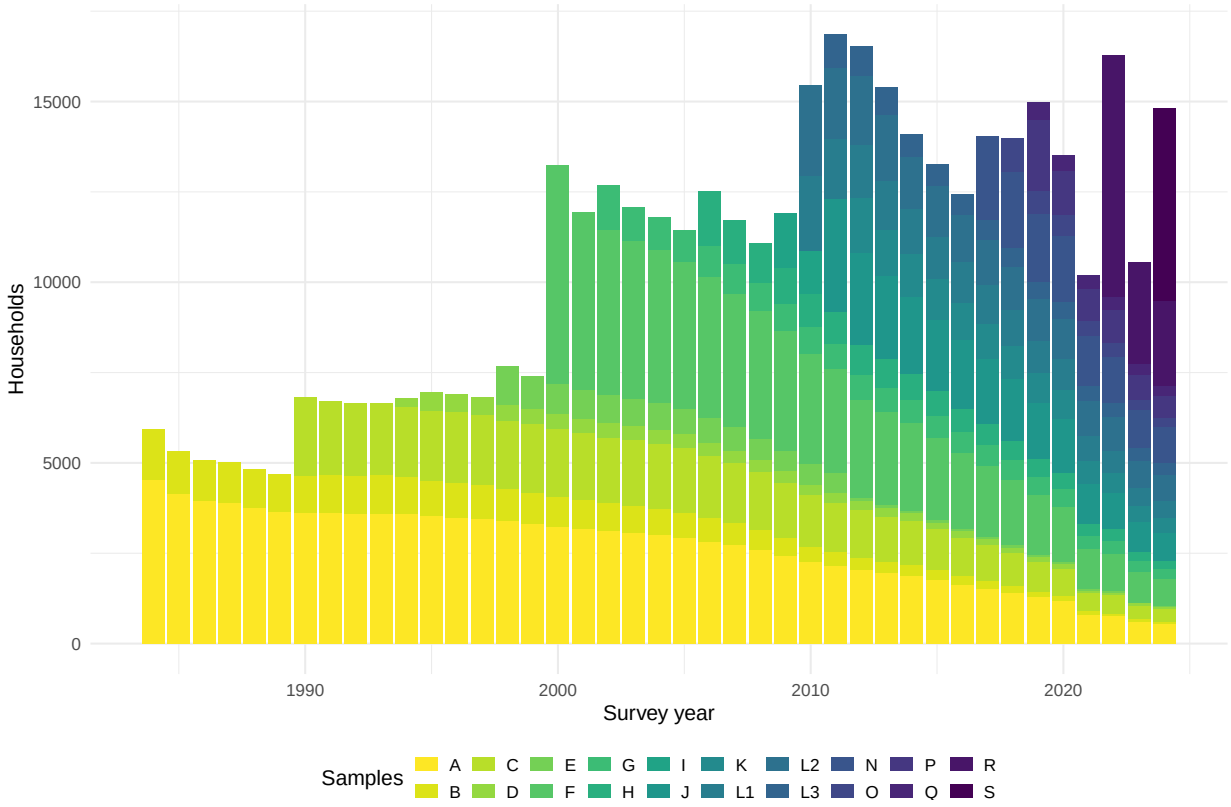

Figure 2.1.: Number of Successful Interviews with Households by Survey Year and Sample.

Table 2.1.: Number of Successful Interviews with Households by Survey Year and Sample.

syear	A	B	C	D	E	F	G	H	I	J	K	L1	L2	L3	N	O	P	Q	R	S	Total
1984	4,528	1,393																			5,921
1985	4,141	1,181																			5,322
1986	3,962	1,128																			5,090
1987	3,910	1,116																			5,026
1988	3,743	1,071																			4,814
1989	3,647	1,043																			4,690
1990	3,612	1,028	2,179																		6,819
1991	3,613	1,056	2,030																		6,699
1992	3,585	1,060	2,020																		6,665
1993	3,603	1,064	1,970																		6,637
1994	3,577	1,023	1,959	236																	6,795
1995	3,526	982	1,938	522																	6,968
1996	3,485	960	1,951	498																	6,894
1997	3,458	931	1,942	479																	6,810
1998	3,387	898	1,886	441	1,056																7,668
1999	3,325	858	1,894	425	886																7,388
2000	3,240	820	1,879	425	842	6,043															13,249
2001	3,168	809	1,850	398	811	4,911															11,947
2002	3,123	766	1,818	402	773	4,586	1,224														12,692
2003	3,074	743	1,813	399	745	4,390	914														12,078
2004	3,012	714	1,813	390	732	4,238	904														11,803
2005	2,939	699	1,777	380	707	4,071	880														11,453
2006	2,825	655	1,723	360	687	3,906	862	1,506													12,524
2007	2,726	616	1,657	345	648	3,693	824	1,191													11,700
2008	2,587	572	1,595	328	602	3,515	787	1,085													11,071
2009	2,424	500	1,539	306	574	3,309	757	998	1,495												11,902
2010	2,249	441	1,440	278	555	3,063	744	915	1,177			2,074	2,500								15,436
2011	2,152	393	1,360	268	546	2,890	707	861		3,136		1,653	1,962	924							16,852
2012	2,038	346	1,313	252	92	2,711	691	820		2,558	1,526	1,467	1,912	813							16,539
2013	1,949	321	1,253	232	82	2,573	679	785		2,306	1,281	1,362	1,808	757							15,388
2014	1,879	302	1,214	213	78	2,419	642	733		2,113	1,188	1,250	1,447	611							14,089
2015	1,760	268	1,133	193	70	2,274	607	684		1,983	1,109	1,185	1,407	597							13,270
2016	1,631	228	1,078	174	68	2,098	594	639		1,883	1,049	1,122	1,303	561							12,428
2017	1,533	203	999	165	67	1,969	562	595		1,777	987	1,054	1,270	534	2,313						14,028
2018	1,409	177	930	148	59	1,814	535	548		1,692	934	992	1,196	517	2,115	935					14,001
2019	1,289	152	831	136	55	1,652	509	492		1,539	837	894	1,148	479	1,890	624	1,960	477			14,964
2020	1,175	137	772	125	52	1,537	483	462		1,474	797	867	1,104	459	1,847	570	1,234	424			13,519
2021	816	85	498	82	31	1,102	381	332		1,095	649	675	971	412	1,404	397	891	366			10,187
2022	773	72	500	78	32	1,037	365	316		990	575	602	934	389	1,289	372	923	346	6,696		16,289
2023	616	64	383	62	20	839	318	239		831	449	490	758	340	1,051	290	687	306	2,804		10,547
2024	547	53	363	59	22	740	286	217		767	412	468	743	320	993	245	634	278	2,354	5,314	14,815

2.1.2. IAB-SOEP Migration Sample

Figure 2.2 provides a graphical illustration of the number of successful interviews on the household level by survey year and sample for the IAB-SOEP Migration Sample. Table 2.2 displays the specific numbers.

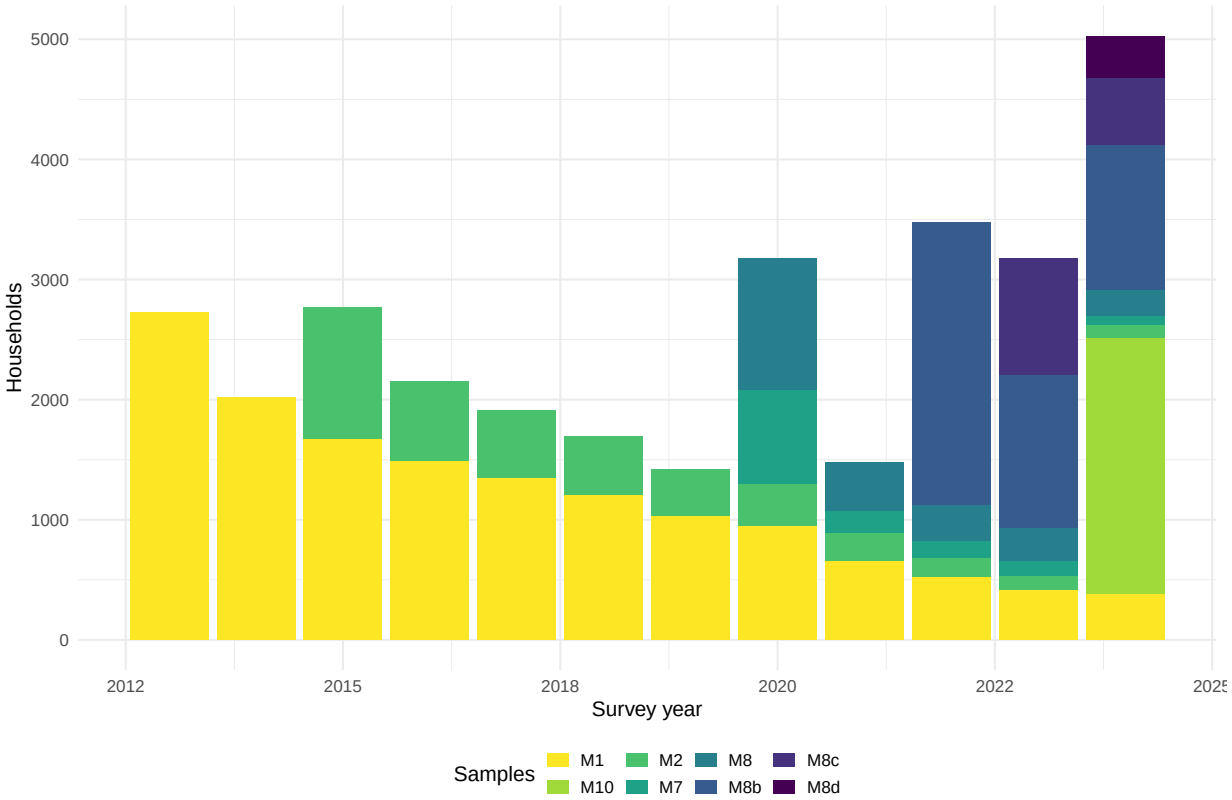

Figure 2.2.: Number of Successful Interviews with Households by Survey Year and Sample.

Table 2.2.: Number of Successful Interviews with Households by Survey Year and Sample.

syear	M1	M2	M7	M8	M8b	M8c	M8d	M10	Total
2013	2,723								2,723
2014	2,021								2,021
2015	1,673	1,095							2,768
2016	1,495	660							2,155
2017	1,353	560							1,913
2018	1,205	487							1,692
2019	1,033	391							1,424
2020	955	344	783	1,096					3,178
2021	657	233	181	405					1,476
2022	527	158	142	295	2,355				3,477
2023	417	120	121	270	1,281	970			3,179
2024	386	109	80	210	1,206	563	348	2,128	5,030

2.1.3. IAB-BAMF-SOEP Survey of Refugees

Figure 2.3 provides a graphical illustration of the number of successful interviews on the household level by survey year and sample for the IAB-BAMF-SOEP Survey of Refugees. Table 2.3 displays the specific numbers.

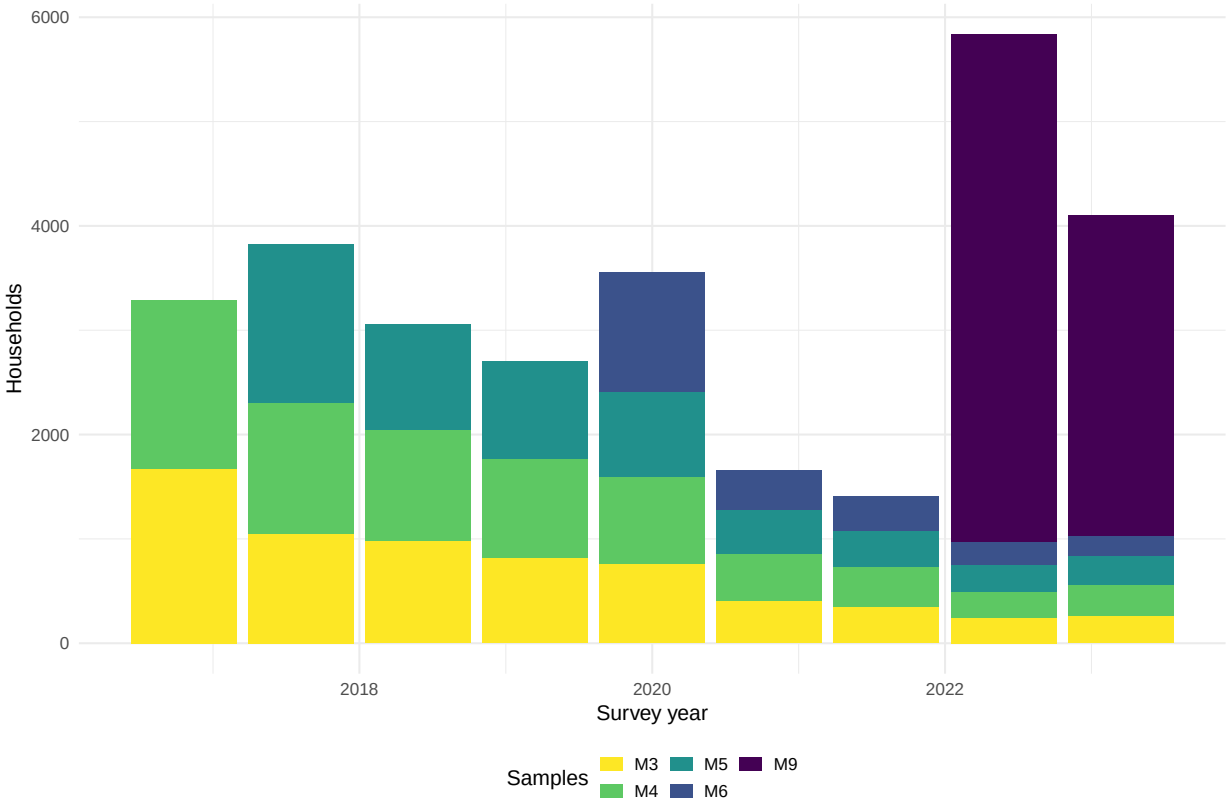

Figure 2.3.: Number of Successful Interviews with Households by Survey Year and Sample.

Table 2.3.: Number of Successful Interviews with Households by Survey Year and Sample.

syear	M3	M4	M5	M6	M9	Total
2016	1,678	1,611				3,289
2017	1,056	1,247	1,519			3,822
2018	986	1,064	1,011			3,061
2019	823	944	930			2,697
2020	764	832	812	1,141		3,549
2021	410	448	423	382		1,663
2022	352	383	337	335		1,407
2023	244	255	250	219	4,869	5,837
2024	267	293	278	195	3,074	4,107

2.2. Individual level

This Section provides details on the number of successfully surveyed adults for SOEP-Core (Subsection 2.2.1), the IAB-SOEP Migration Sample (Subsection 2.2.2), and the IAB-BAMF-SOEP Survey of Refugees (Subsection 2.2.3).

2.2.1. SOEP-Core

Figure 2.4 provides a graphical illustration of the number of successful person interviews on the individual level by survey year and sample for SOEP-Core. Table 2.4 displays the specific numbers.

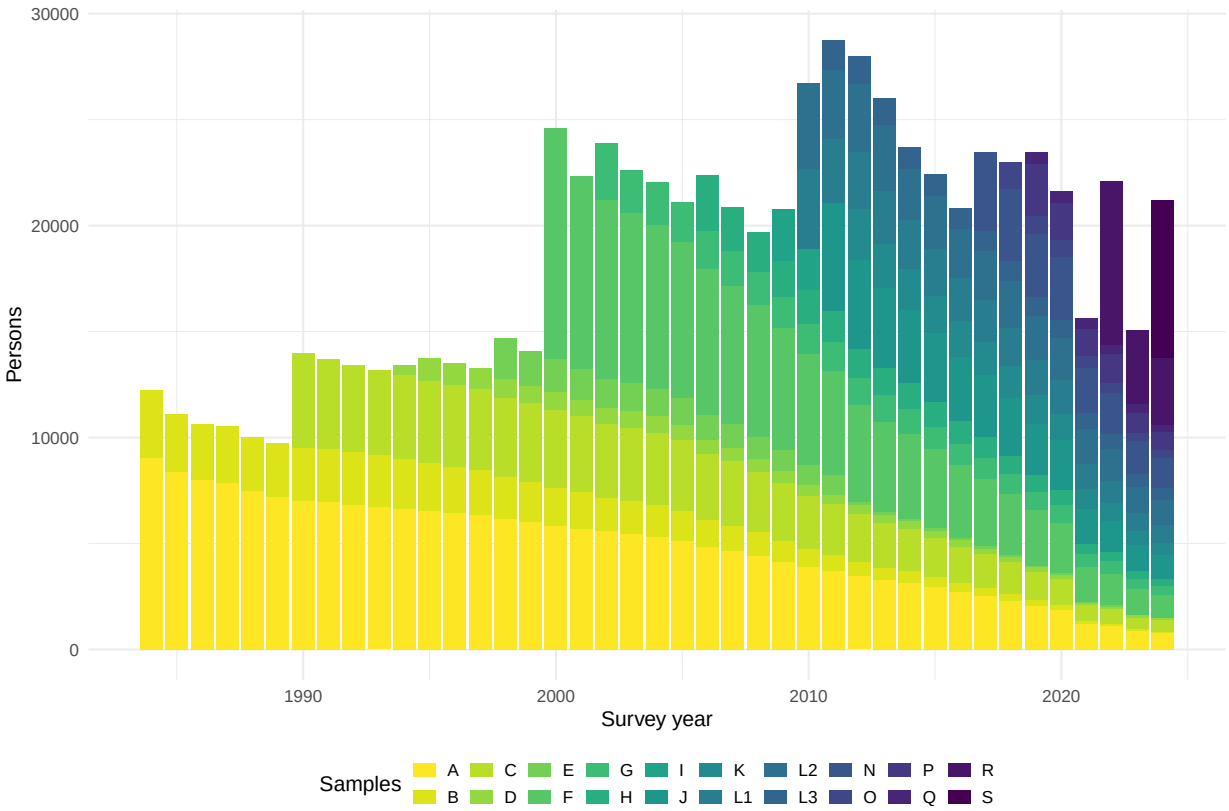

Figure 2.4.: Number of Successful Interviews with Persons by Survey Year and Sample.

Table 2.4.: Number of Successful Interviews with Persons by Survey Year and Sample.

syear	A	B	C	D	E	F	G	H	I	J	K	L1	L2	L3	N	O	P	Q	R	S	Total
1984	9,076	3,169																			12,245
1985	8,372	2,718																			11,090
1986	8,009	2,637																			10,646
1987	7,868	2,648																			10,516
1988	7,481	2,542																			10,023
1989	7,201	2,509																			9,710
1990	7,036	2,483	4,453																		13,972
1991	6,974	2,493	4,202																		13,669
1992	6,821	2,484	4,092																		13,397
1993	6,747	2,459	3,973																		13,179
1994	6,637	2,364	3,945	471																	13,417
1995	6,567	2,231	3,892	1,078																	13,768
1996	6,454	2,152	3,882	1,023																	13,511
1997	6,378	2,089	3,844	972																	13,283
1998	6,184	1,961	3,730	885	1,910																14,670
1999	6,045	1,864	3,709	838	1,629																14,085
2000	5,852	1,771	3,687	837	1,549	10,880															24,576
2001	5,713	1,711	3,576	789	1,464	9,098															22,351
2002	5,577	1,598	3,466	780	1,373	8,427	2,671														23,892
2003	5,484	1,520	3,459	789	1,333	8,010	2,016														22,611
2004	5,343	1,468	3,435	760	1,300	7,727	1,986														22,019
2005	5,152	1,423	3,311	735	1,241	7,372	1,871														21,105
2006	4,839	1,283	3,106	673	1,174	6,899	1,768	2,616													22,358
2007	4,679	1,182	3,022	645	1,123	6,528	1,658	2,049													20,886
2008	4,442	1,091	2,871	595	1,059	6,198	1,546	1,882													19,684
2009	4,163	956	2,750	554	1,013	5,741	1,469	1,714	2,432												20,792
2010	3,885	839	2,543	485	964	5,261	1,419	1,567	1,950			3,756	4,051								26,720
2011	3,719	753	2,378	454	947	4,925	1,341	1,465		5,087		3,028	3,222	1,414							28,733
2012	3,490	655	2,247	432	159	4,556	1,270	1,376		4,174	2,447	2,697	3,185	1,295							27,983
2013	3,287	588	2,090	389	134	4,268	1,246	1,316		3,743	2,088	2,479	3,102	1,262							25,992
2014	3,147	555	1,993	359	127	4,003	1,161	1,243		3,453	1,938	2,280	2,446	1,008							23,713
2015	2,939	504	1,840	336	109	3,726	1,077	1,150		3,240	1,790	2,176	2,489	1,037							22,413
2016	2,719	429	1,726	288	102	3,421	1,037	1,052		3,058	1,675	2,055	2,289	968							20,819
2017	2,532	367	1,611	270	102	3,192	974	987		2,898	1,592	1,958	2,303	976	3,720						23,482
2018	2,315	312	1,498	244	91	2,900	899	893		2,714	1,495	1,825	2,217	967	3,360	1,238					22,968
2019	2,070	269	1,316	227	84	2,599	848	802		2,452	1,333	1,644	2,105	902	2,963	866	2,440	564			23,484
2020	1,888	228	1,203	211	80	2,393	807	731		2,332	1,256	1,590	1,979	877	2,941	813	1,739	546			21,614
2021	1,234	123	731	126	48	1,655	602	496		1,617	949	1,166	1,666	754	2,144	551	1,268	484			15,614
2022	1,115	101	714	110	50	1,502	572	471		1,427	850	1,049	1,522	690	1,922	505	1,332	444	7,697		22,073
2023	874	92	553	96	31	1,208	488	353		1,219	660	882	1,236	596	1,543	393	963	385	3,489		15,061
2024	778	76	534	89	30	1,061	434	321		1,118	602	845	1,190	542	1,454	333	867	342	3,128	7,443	21,187

2.2.2. IAB-SOEP Migration Sample

Figure 2.5 provides a graphical illustration of the number of successful person interviews on the individual level by survey year and sample for the IAB-SOEP Migration Sample. Table 2.5 displays the specific numbers.

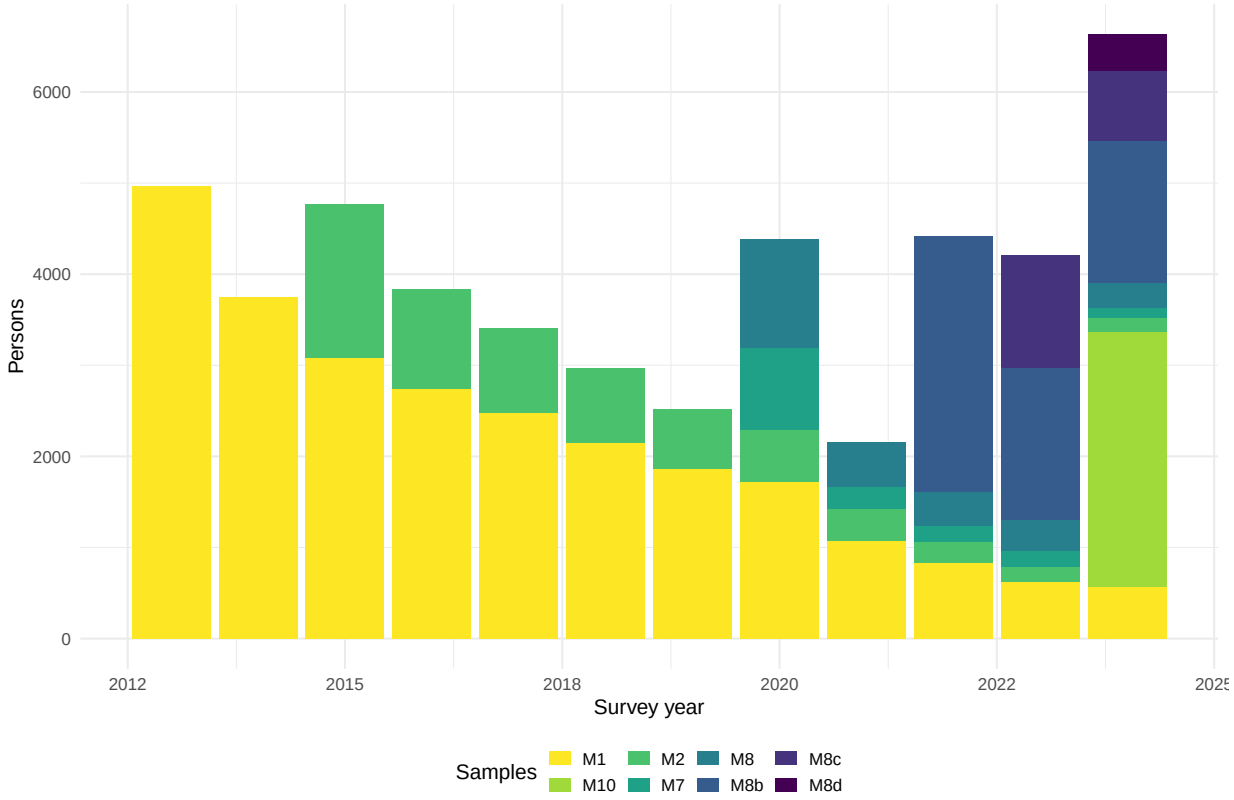

Figure 2.5.: Number of Successful Interviews with Persons by Survey Year and Sample.

Table 2.5.: Number of Successful Interviews with Persons by Survey Year and Sample.

syear	M1	M2	M7	M8	M8b	M8c	M8d	M10	Total
2013	4,964								4,964
2014	3,752								3,752
2015	3,081	1,689							4,770
2016	2,738	1,094							3,832
2017	2,478	930							3,408
2018	2,146	816							2,962
2019	1,865	650							2,515
2020	1,721	571	895	1,196					4,383
2021	1,069	361	233	488					2,151
2022	830	227	182	368	2,808				4,415
2023	622	168	171	338	1,676	1,235			4,210
2024	576	153	110	282	1,551	767	403	2,790	6,632

2.2.3. IAB-BAMF-SOEP Survey of Refugees

Figure 2.6 provides a graphical illustration of the number of successful person interviews on the individual level by survey year and sample for the IAB-BAMF-SOEP Survey of Refugees. Table 2.6 displays the specific numbers.

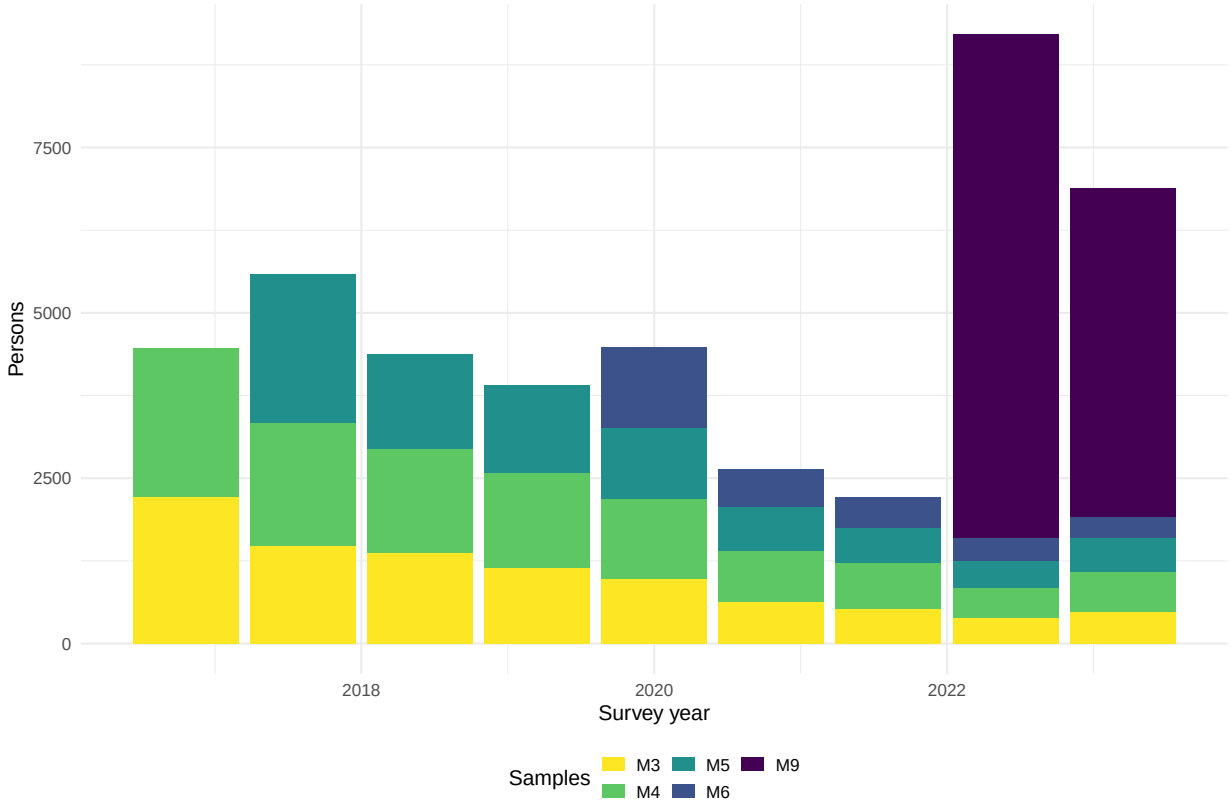

Figure 2.6.: Number of Successful Interviews with Persons by Survey Year and Sample.

Table 2.6.: Number of Successful Interviews with Persons by Survey Year and Sample.

syear	M3	M4	M5	M6	M9	Total
2016	2,213	2,252				4,465
2017	1,472	1,871	2,252			5,595
2018	1,369	1,579	1,428			4,376
2019	1,147	1,440	1,319			3,906
2020	979	1,211	1,067	1,216		4,473
2021	634	773	662	567		2,636
2022	531	690	530	465		2,216
2023	393	451	408	345	7,610	9,207
2024	476	617	503	321	4,970	6,887

2.3. Continuance and Exit: The First Wave Gross Samples and their Participation Behavior

This Section studies the participation behavior of the first-wave respondents in the subsequent years distinguishing between continued participation ("With interview"), exits due to survey-unrelated attrition ("Moved abroad", "Deceased", "Under the age of 16"), and exits due to survey-related attrition ("Temporary drop-out", "Drop-out"). The number of first-wave respondents is fixed and provided in the figure's subtitle. There is an increase in the number of deceased persons in 2009 resulting from a tracking study.

2.3.1. SOEP-Core

The following figures, starting with Figure 2.7, display the participation behavior of the first-wave respondents in SOEP-Core.

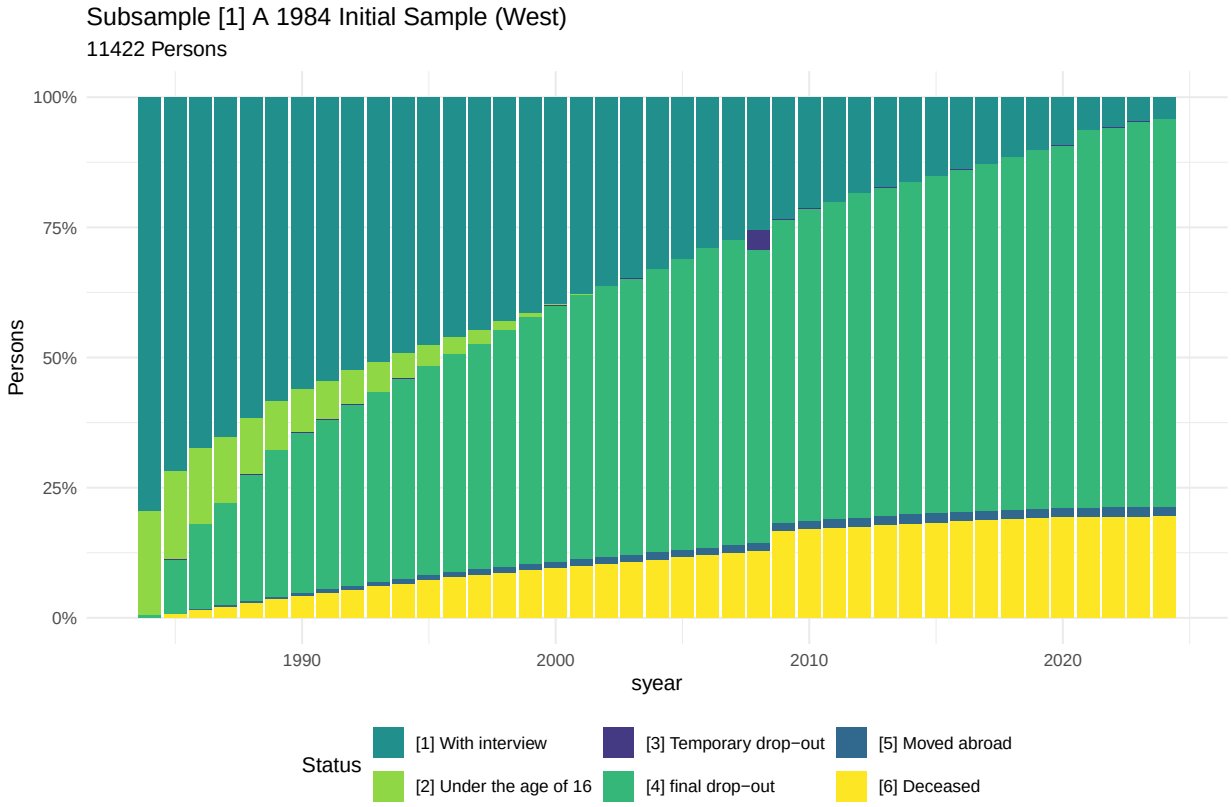

Figure 2.7.: First-Wave Persons and their Participation Behavior in Sample A.

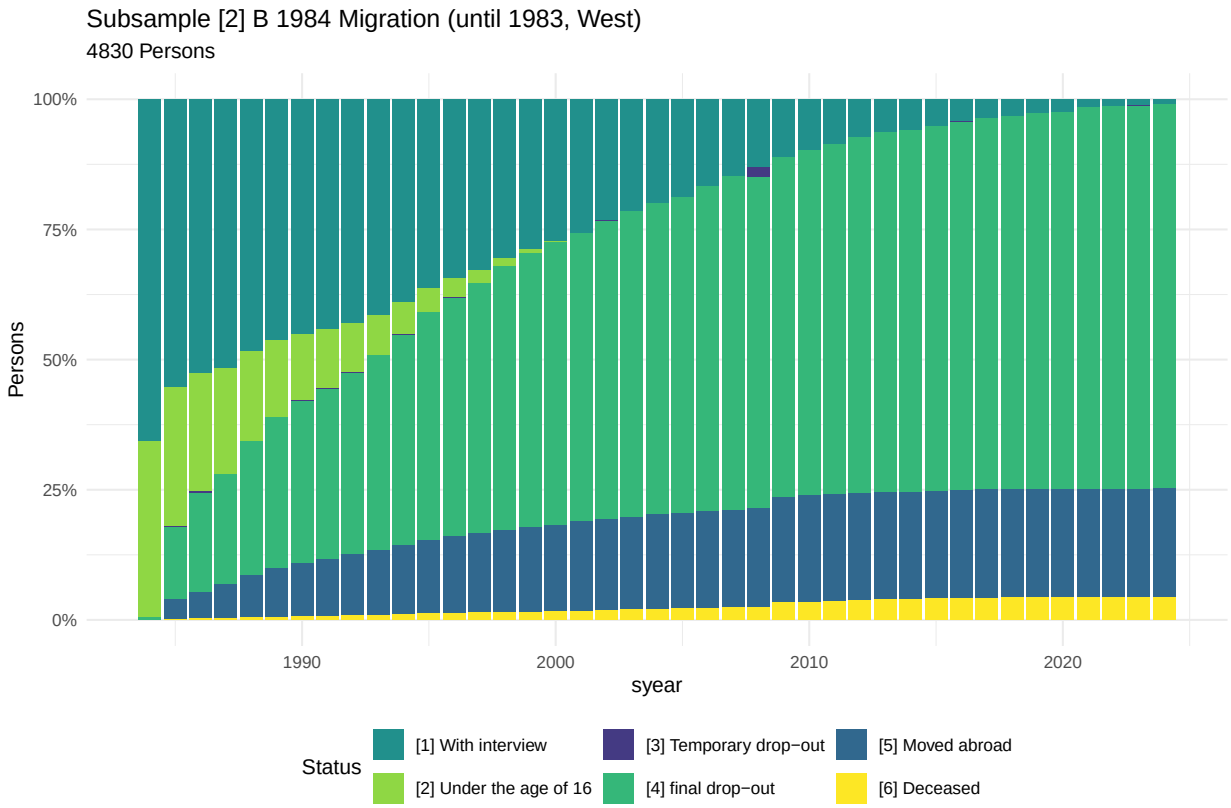

Figure 2.8.: First-Wave Persons and their Participation Behavior in Sample B.

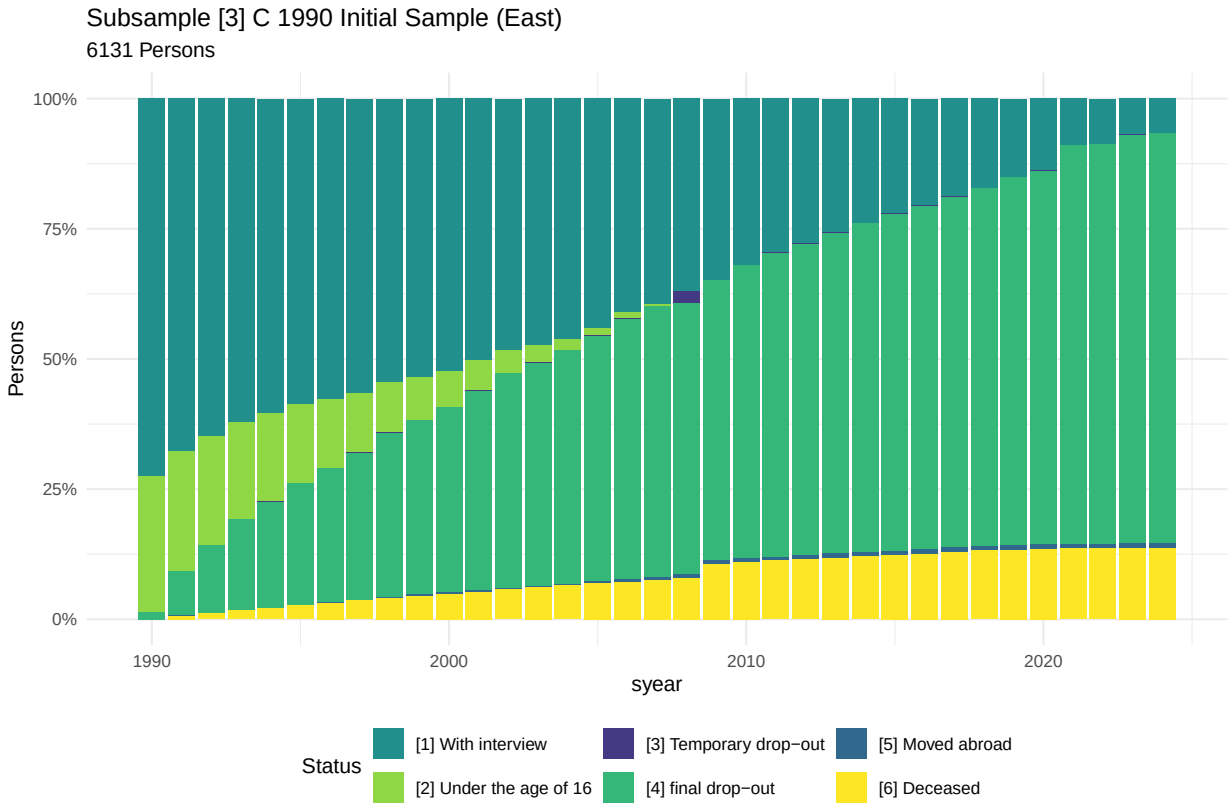

Figure 2.9.: First-Wave Persons and their Participation Behavior in Sample C.

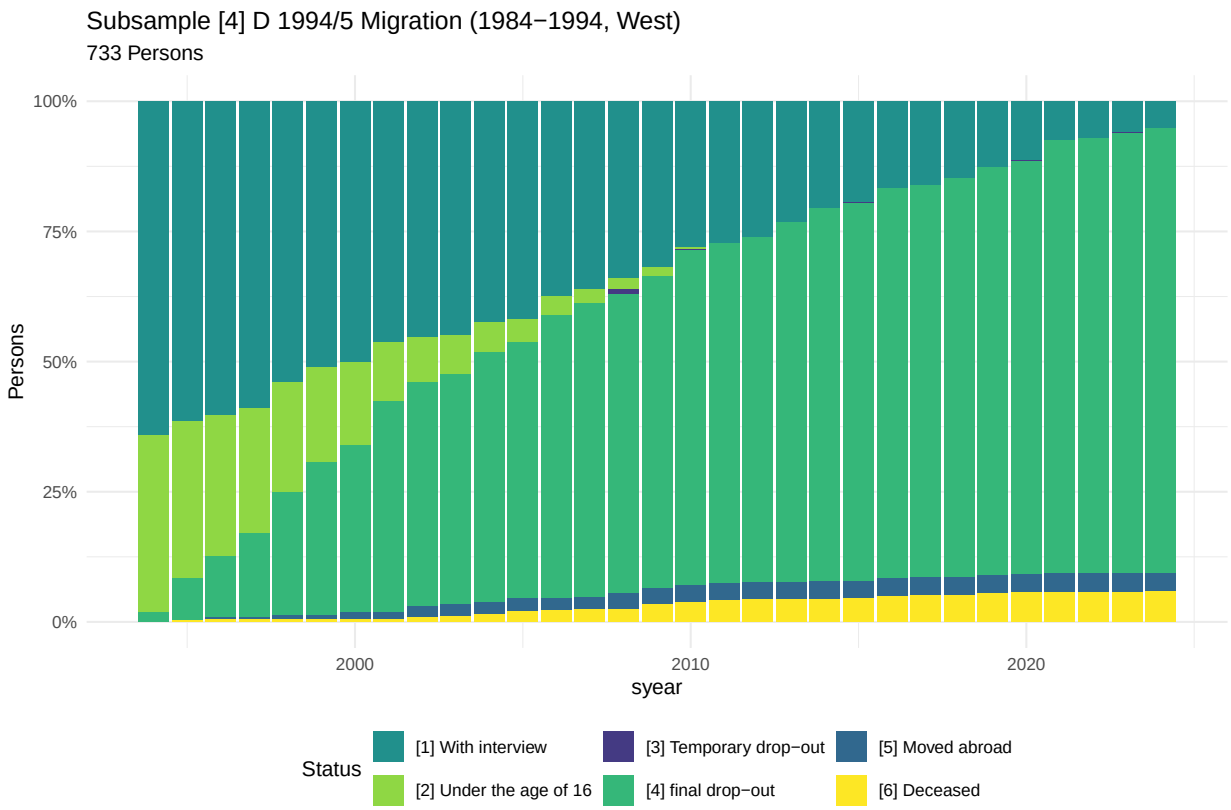

Figure 2.10.: First-Wave Persons and their Participation Behavior in Sample D.

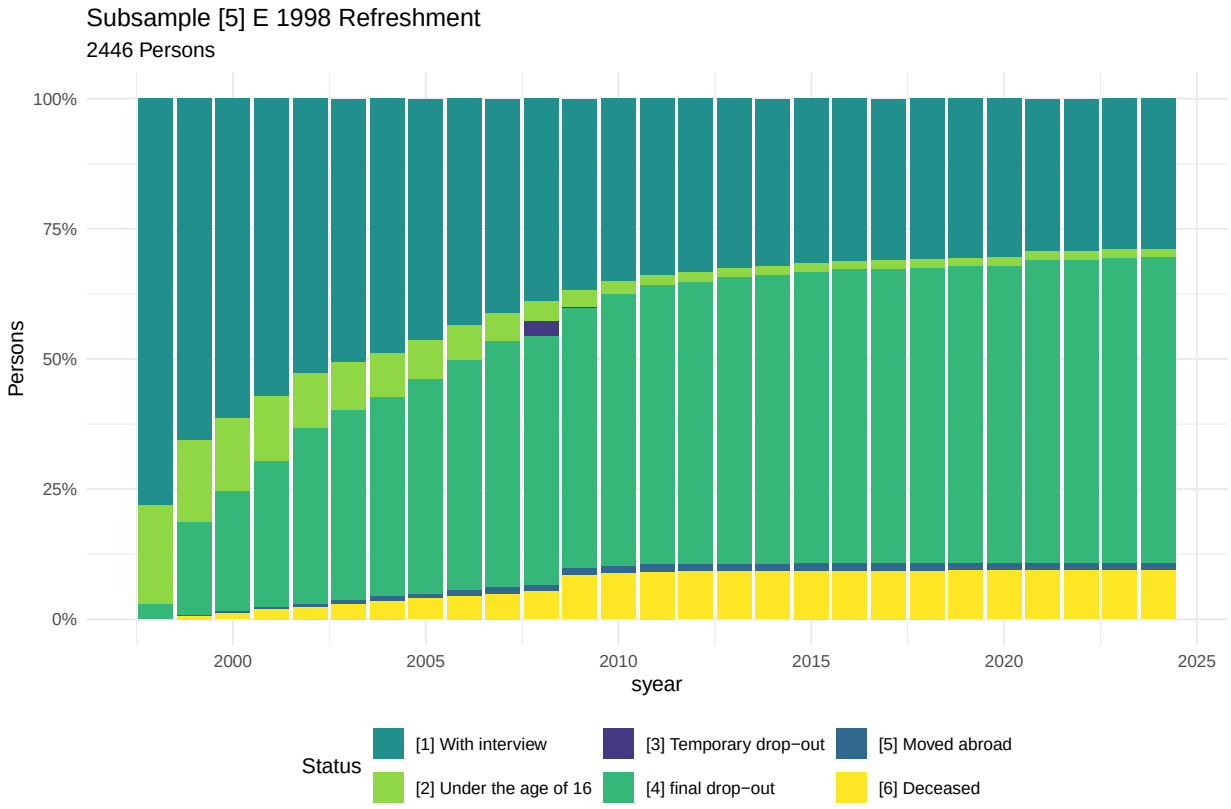

Figure 2.11.: First-Wave Persons and their Participation Behavior in Sample E.

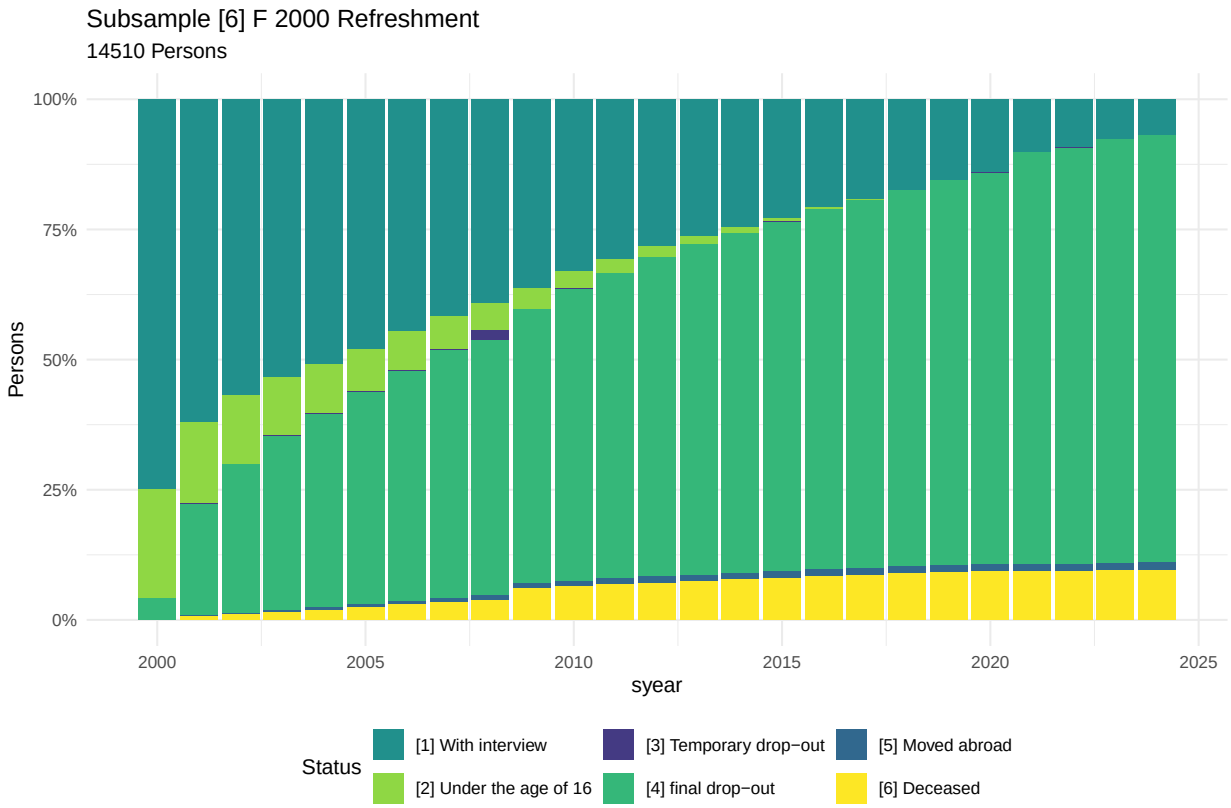

Figure 2.12.: First-Wave Persons and their Participation Behavior in Sample F.

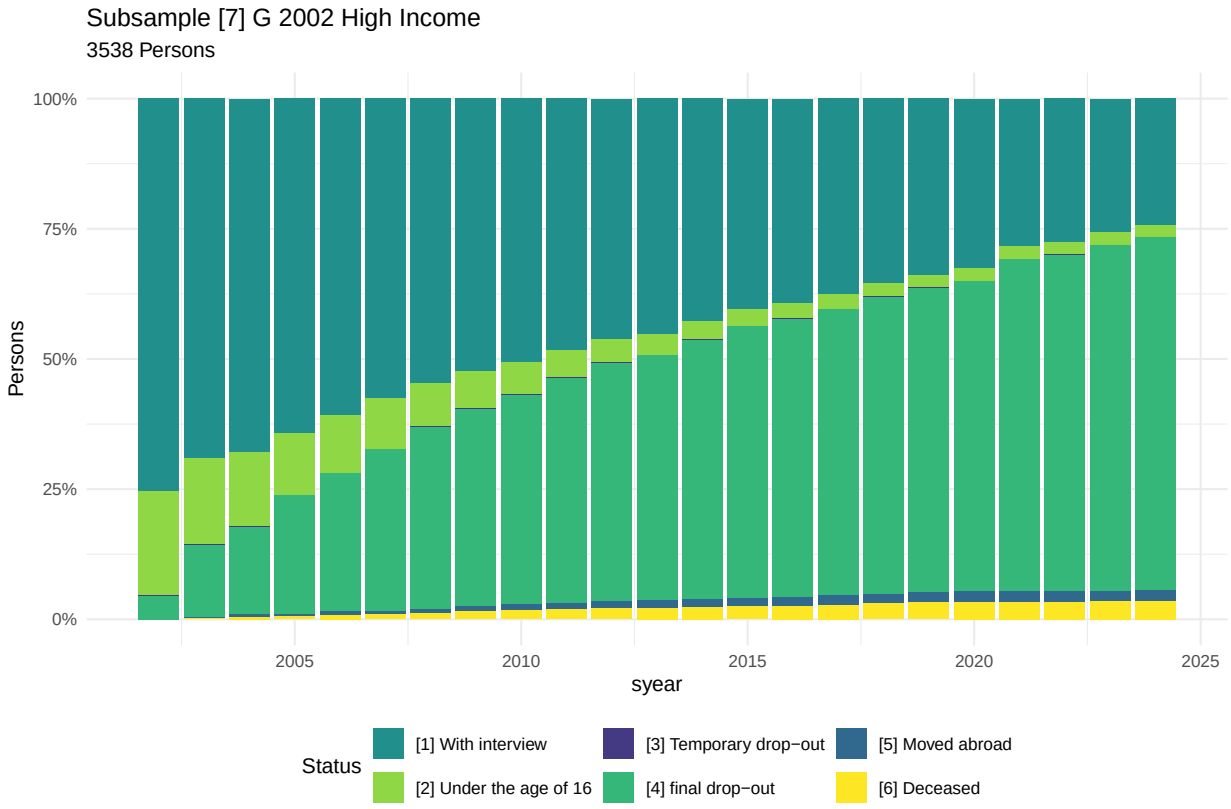

Figure 2.13.: First-Wave Persons and their Participation Behavior in Sample G.

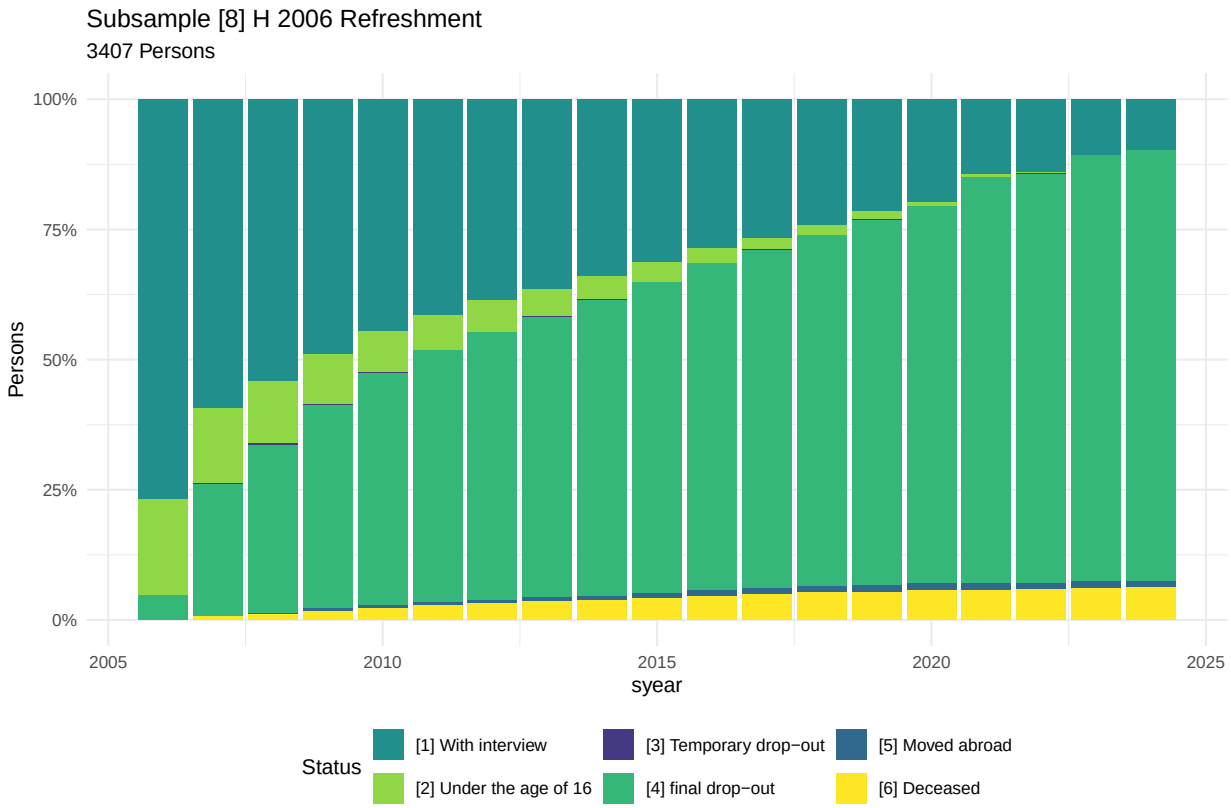

Figure 2.14.: First-Wave Persons and their Participation Behavior in Sample H.

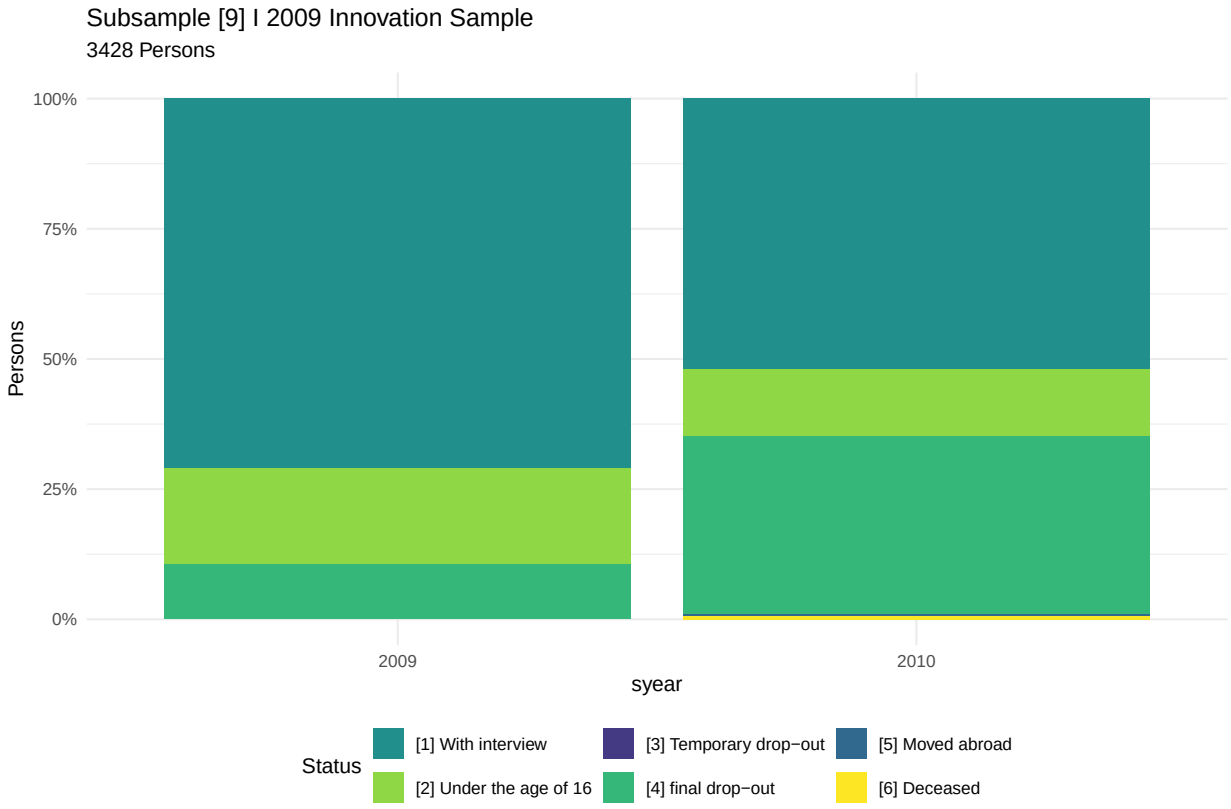

Figure 2.15.: First-Wave Persons and their Participation Behavior in Sample I.

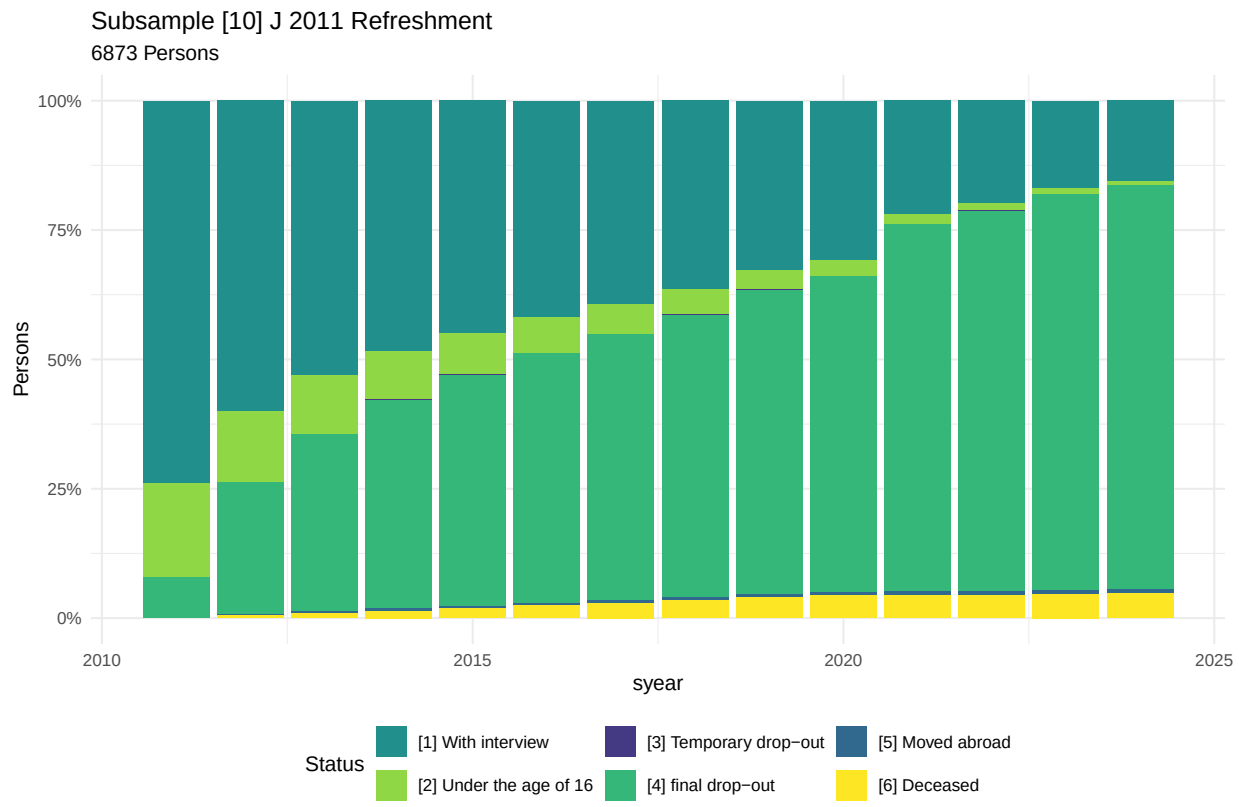

Figure 2.16.: First-Wave Persons and their Participation Behavior in Sample J.

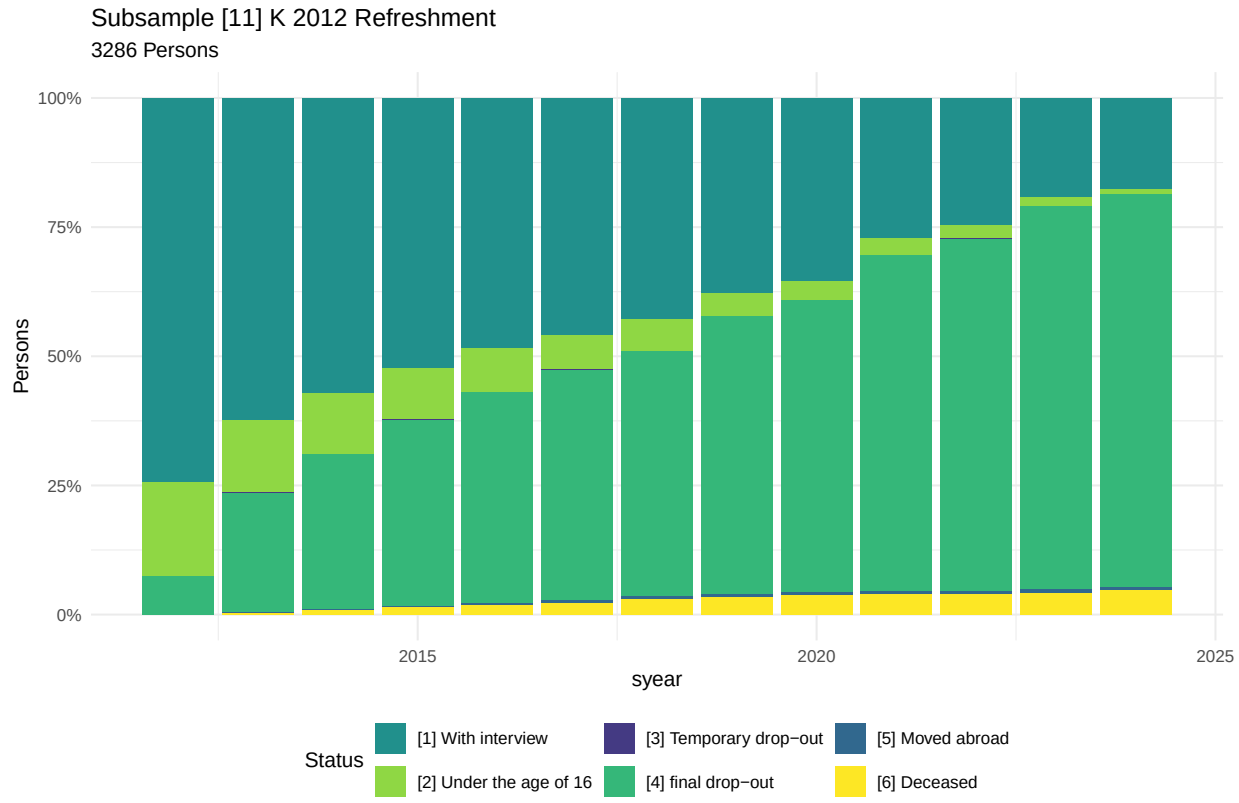

Figure 2.17.: First-Wave Persons and their Participation Behavior in Sample K.

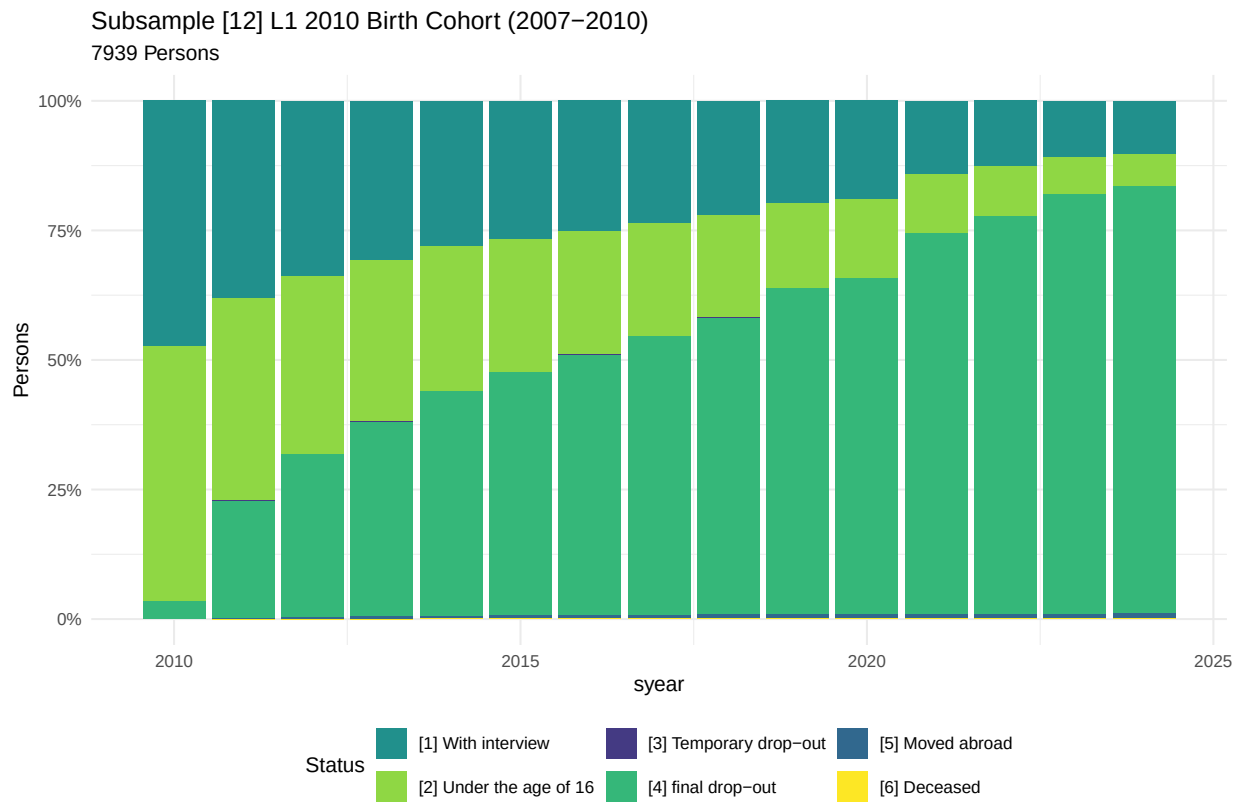

Figure 2.18.: First-Wave Persons and their Participation Behavior in Sample L1.

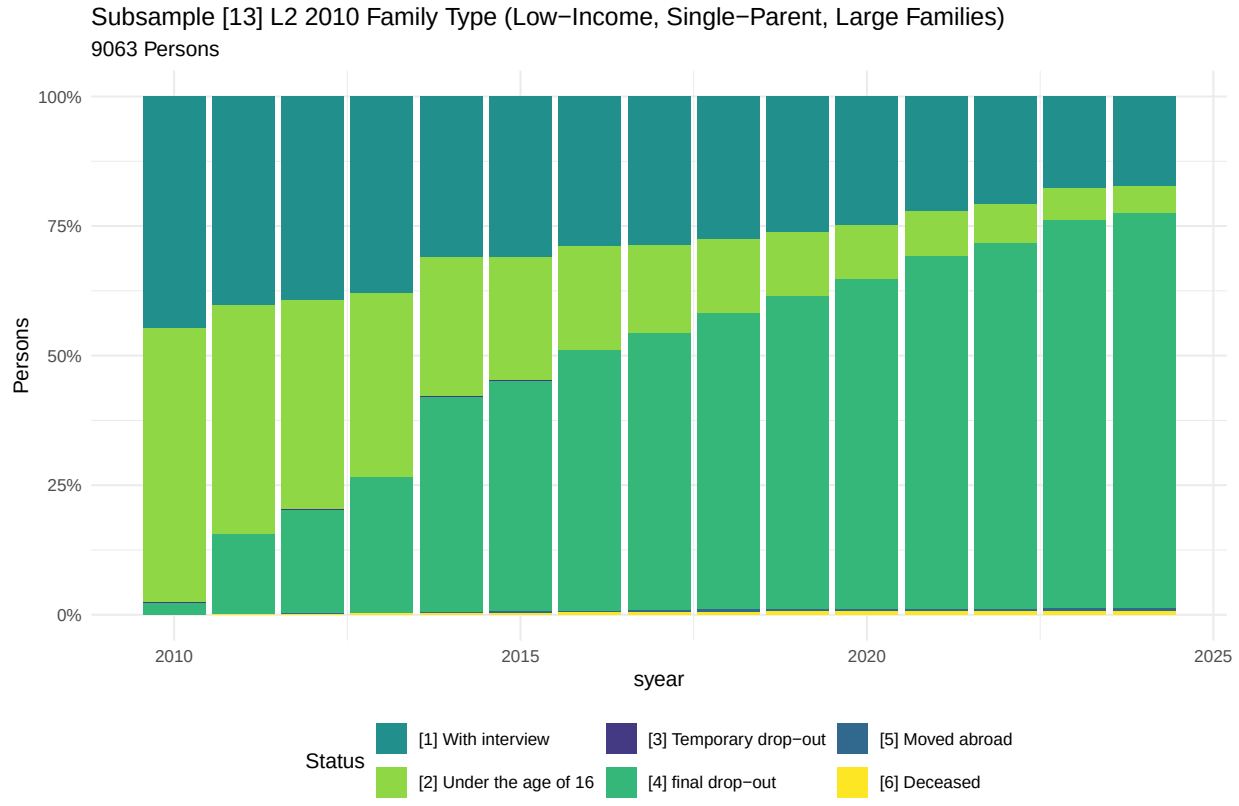

Figure 2.19.: First-Wave Persons and their Participation Behavior in Sample L2.

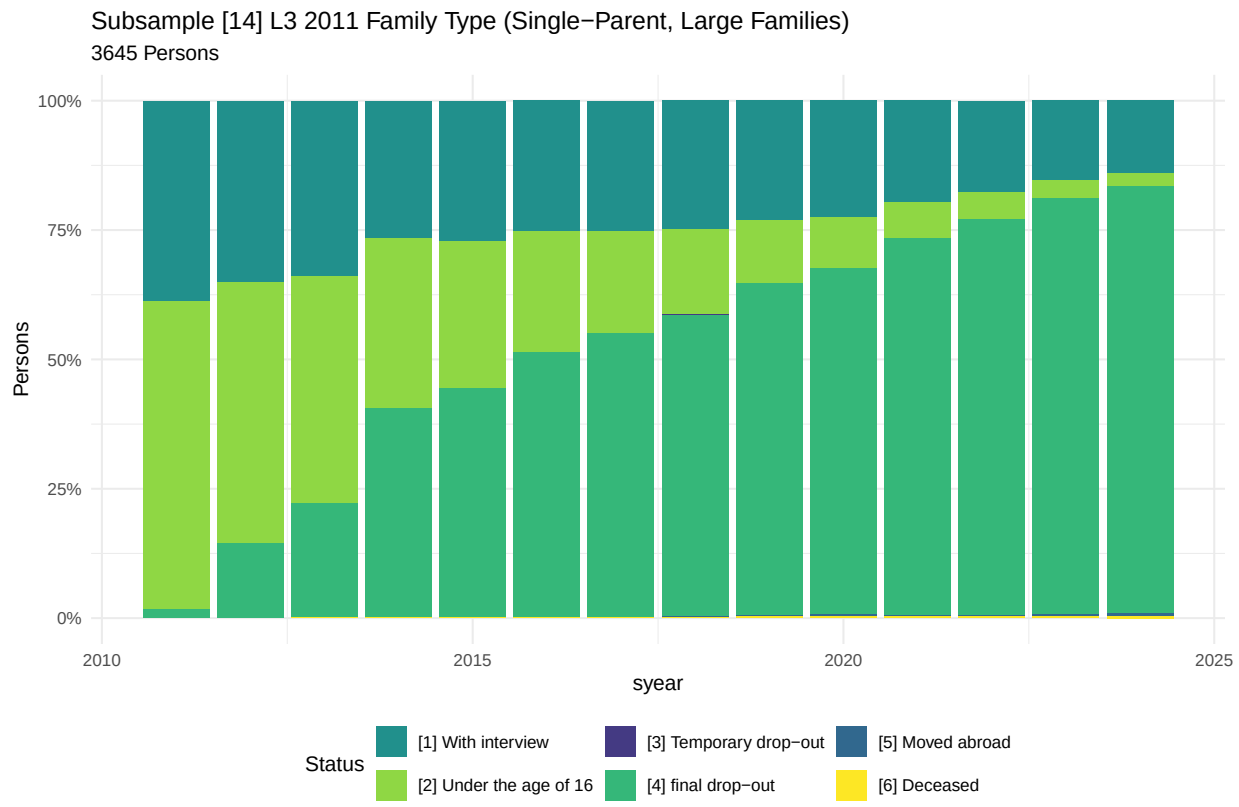

Figure 2.20.: First-Wave Persons and their Participation Behavior in Sample L3.

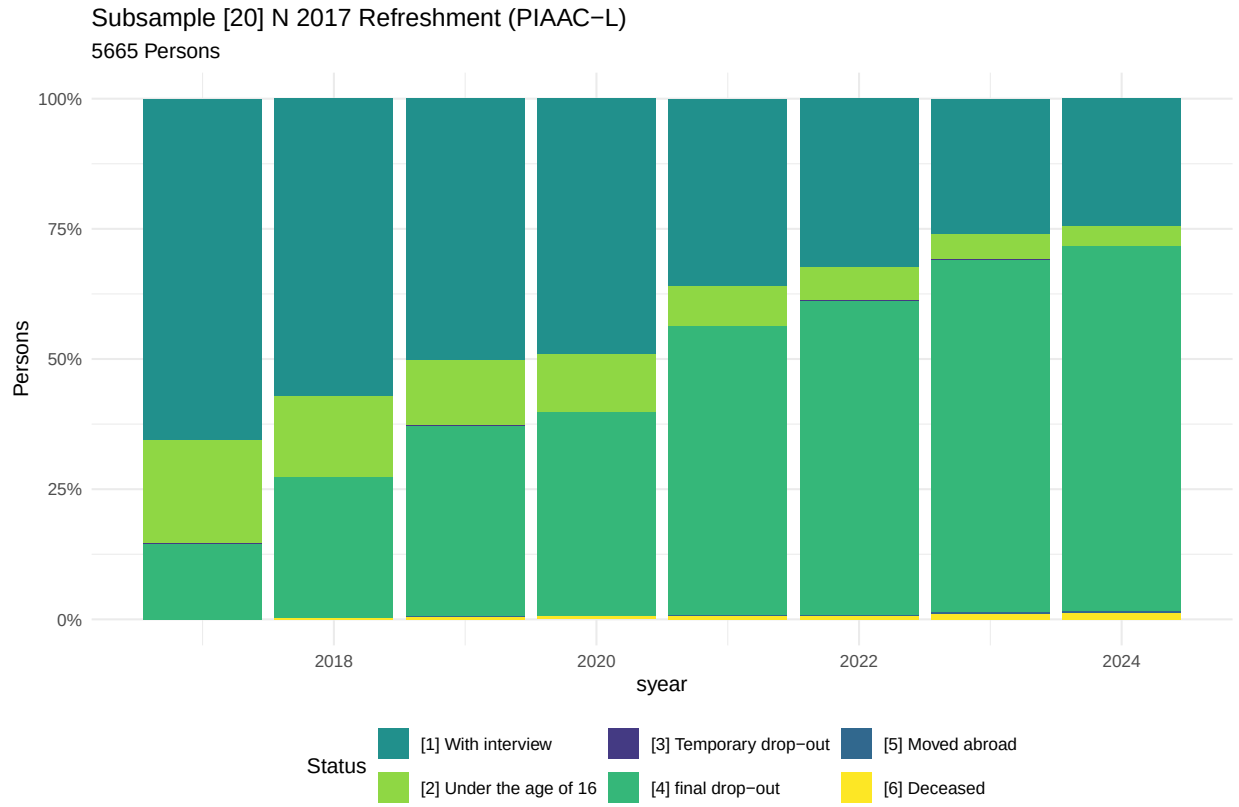

Figure 2.21.: First-Wave Persons and their Participation Behavior in Sample N.

Figure 2.22.: First-Wave Persons and their Participation Behavior in Sample O.

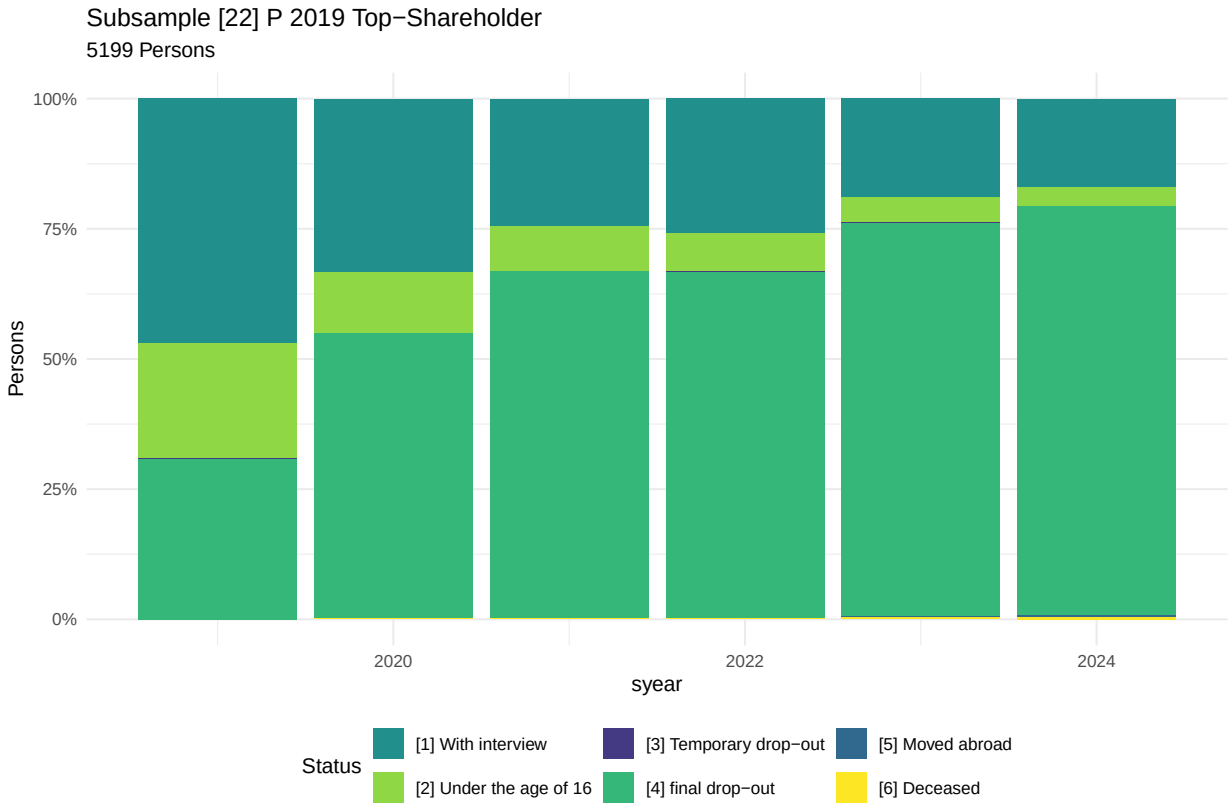

Figure 2.23.: First-Wave Persons and their Participation Behavior in Sample P.

Figure 2.24.: First-Wave Persons and their Participation Behavior in Sample Q.

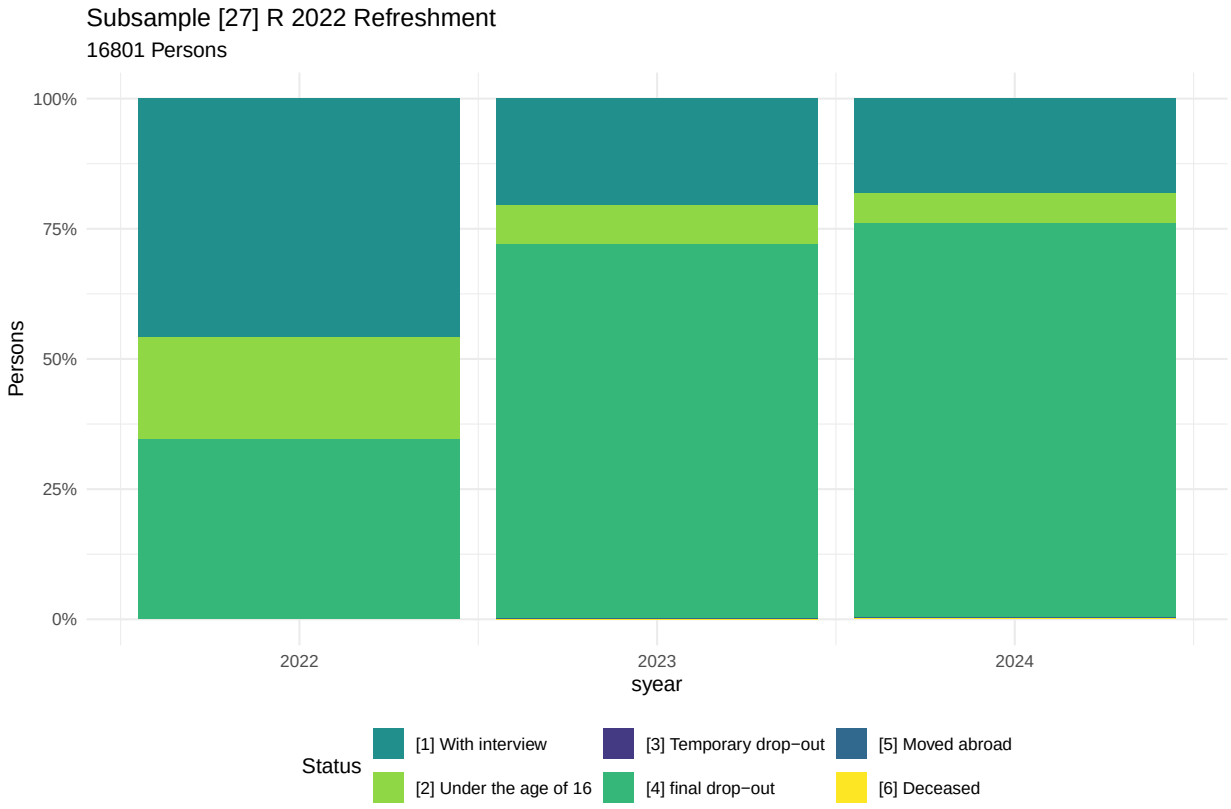

Figure 2.25.: First-Wave Persons and their Participation Behavior in Sample R.

2.3.2. IAB-SOEP Migration Sample

The following figures, starting with Figure 2.26, display the participation behavior of the first-wave respondents in the IAB-SOEP Migration Sample.

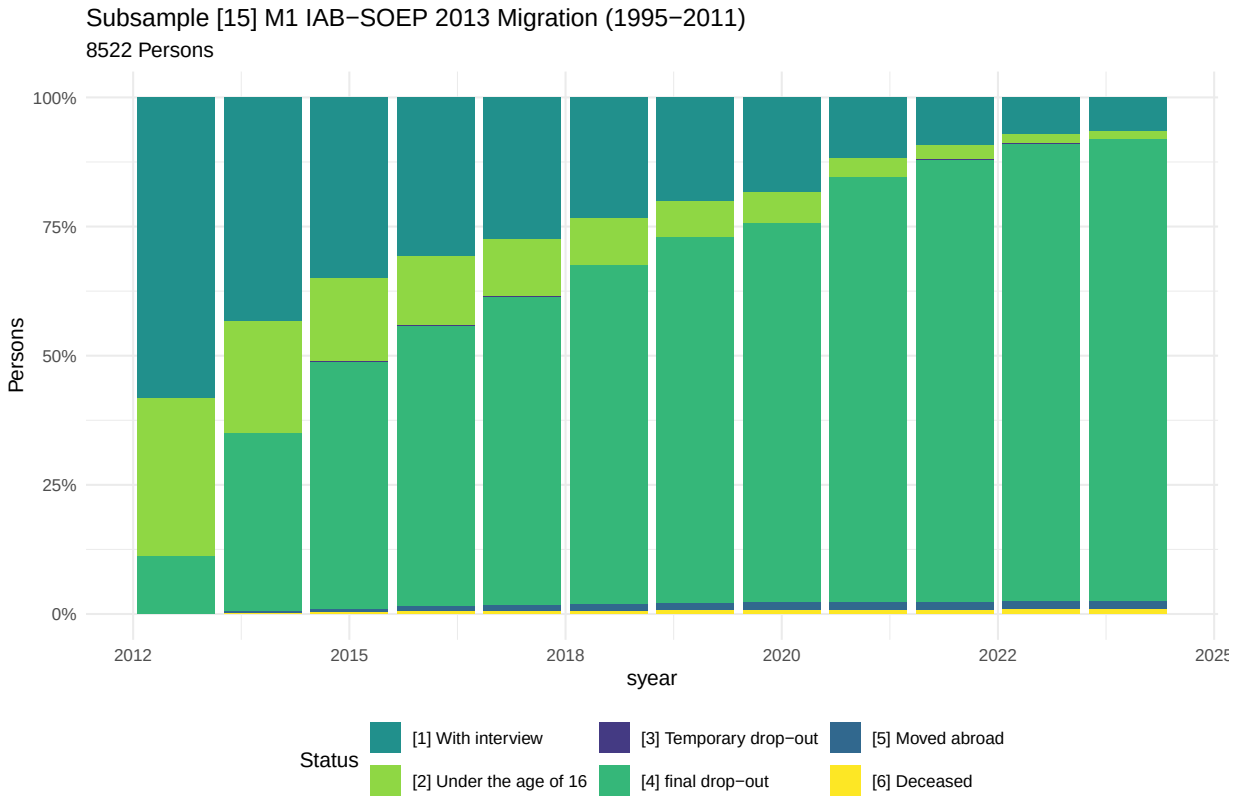

Figure 2.26.: First-Wave Persons and their Participation Behavior in Sample M1.

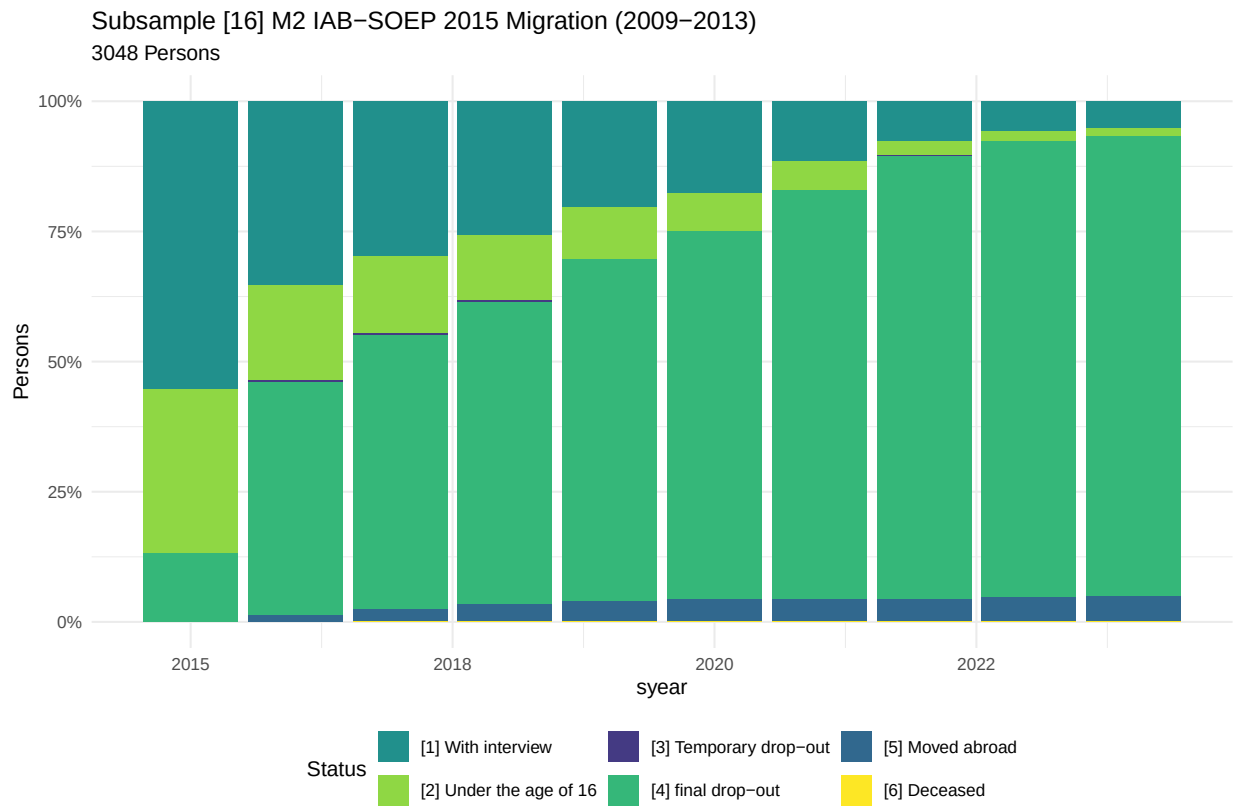

Figure 2.27.: First-Wave Persons and their Participation Behavior in Sample M2.

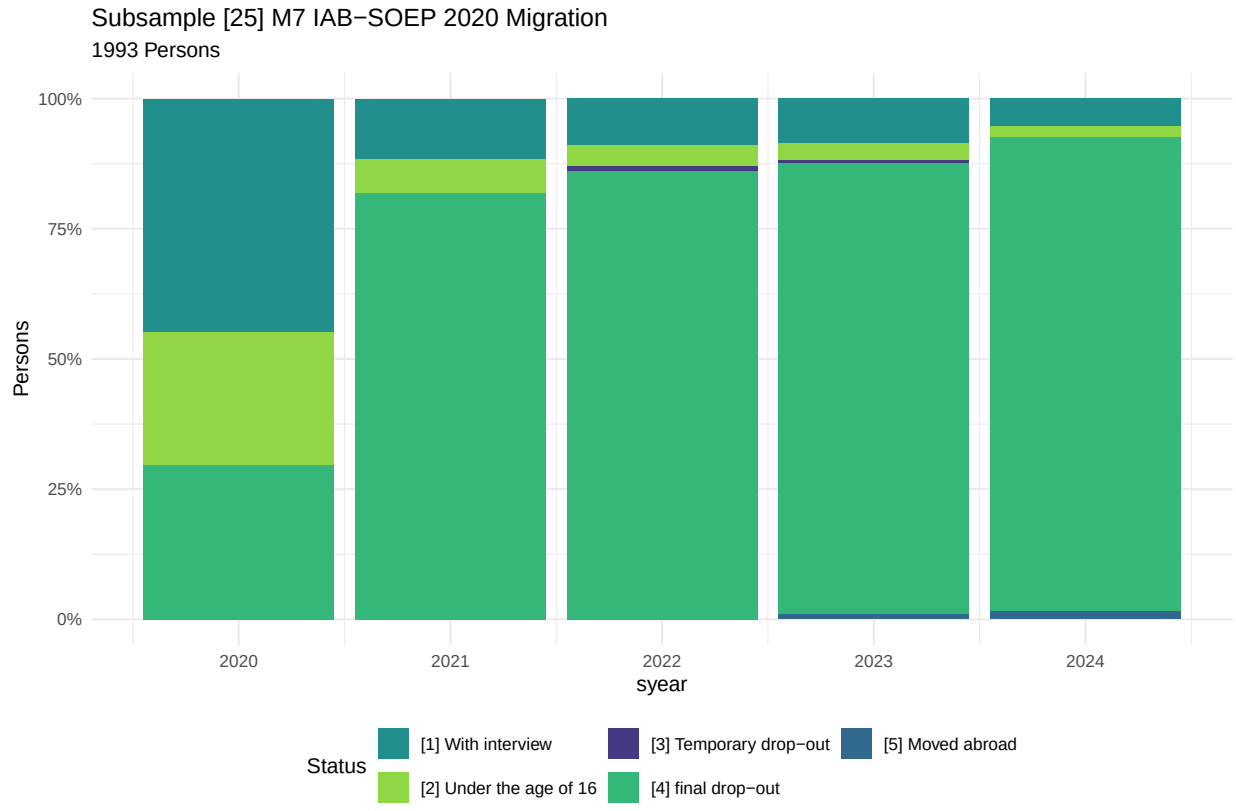

Figure 2.28.: First-Wave Persons and their Participation Behavior in Sample M7.

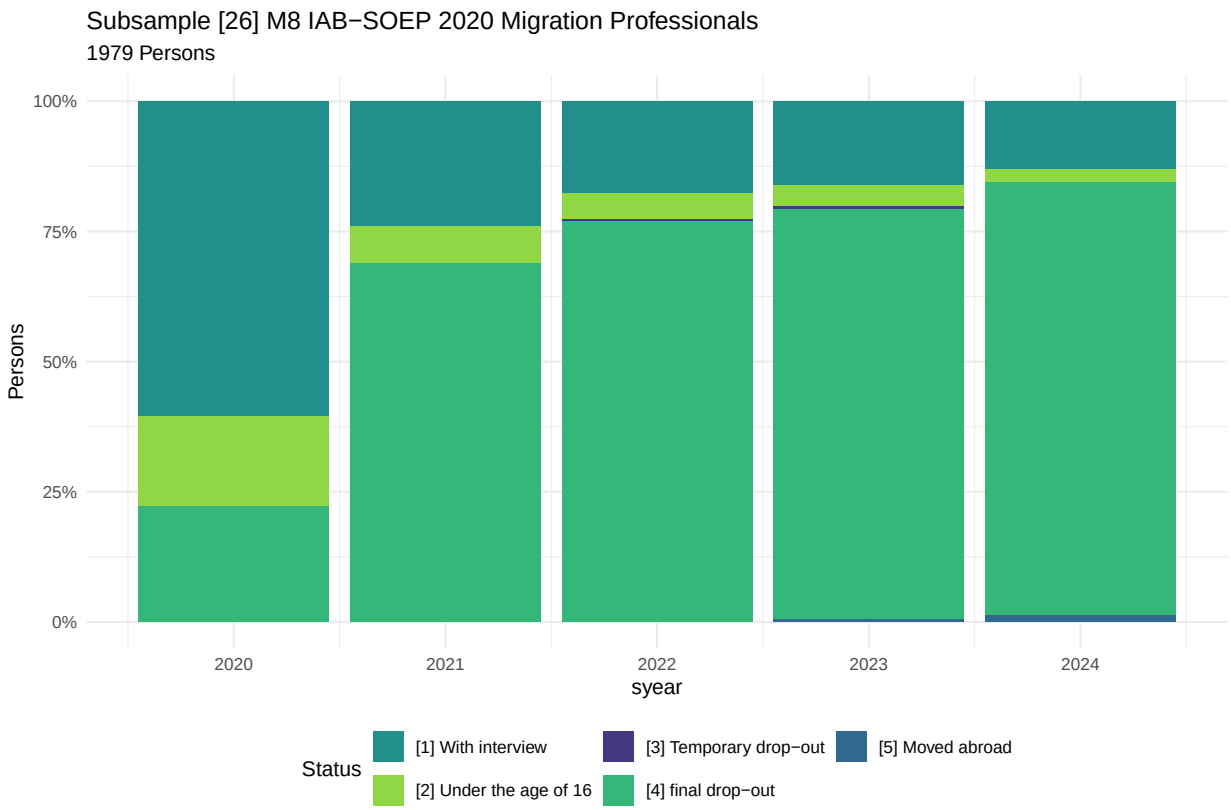

Figure 2.29.: First-Wave Persons and their Participation Behavior in Sample M8.

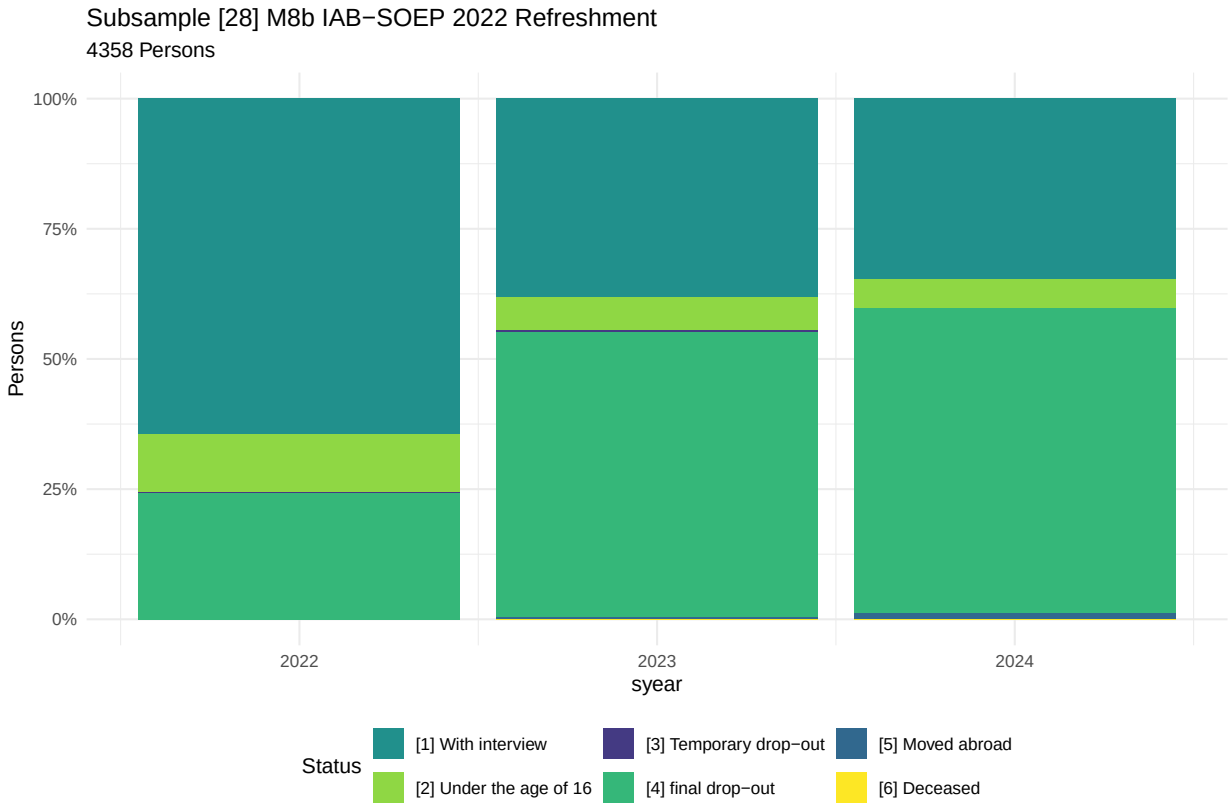

Figure 2.30.: First-Wave Persons and their Participation Behavior in Sample M8b.

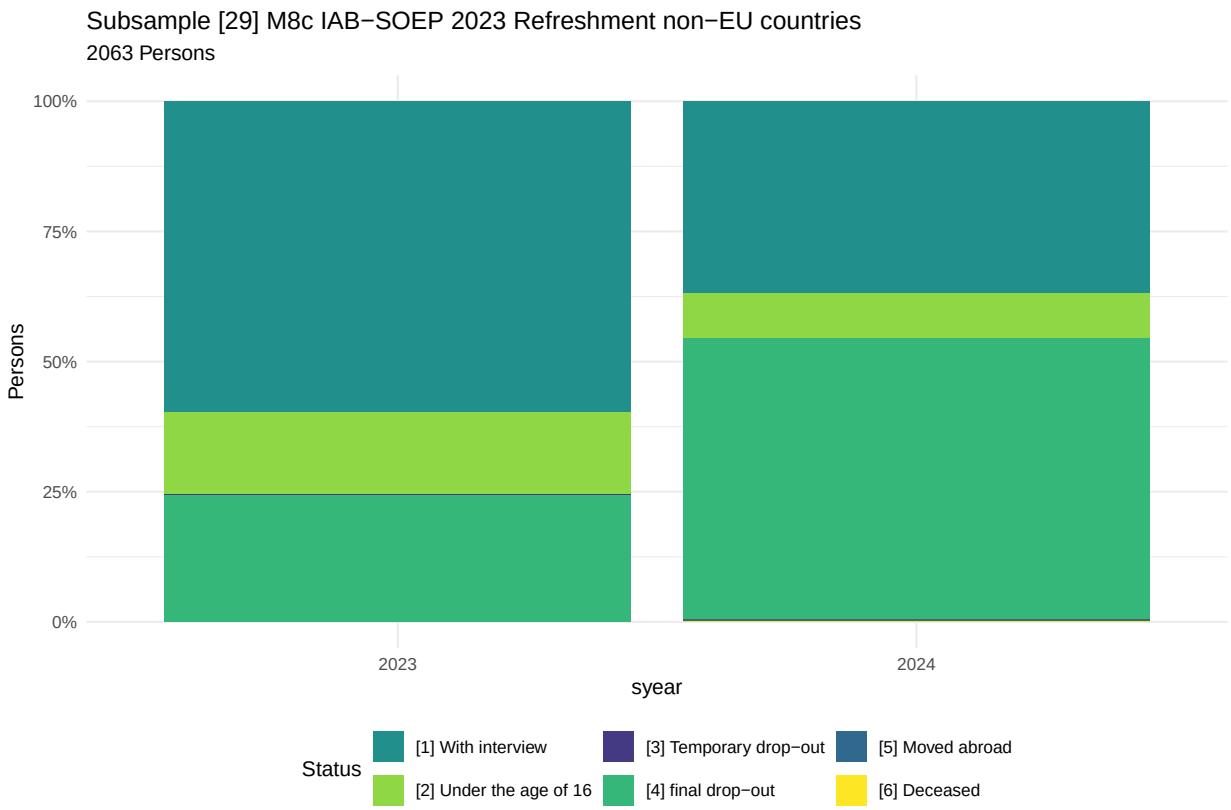

Figure 2.31.: First-Wave Persons and their Participation Behavior in Sample M8c.

2.3.3. IAB-BAMF-SOEP Survey of Refugees

The following figures, starting with Figure 2.32, display the participation behavior of the first-wave respondents in the IAB-BAMF-SOEP Survey of Refugees.

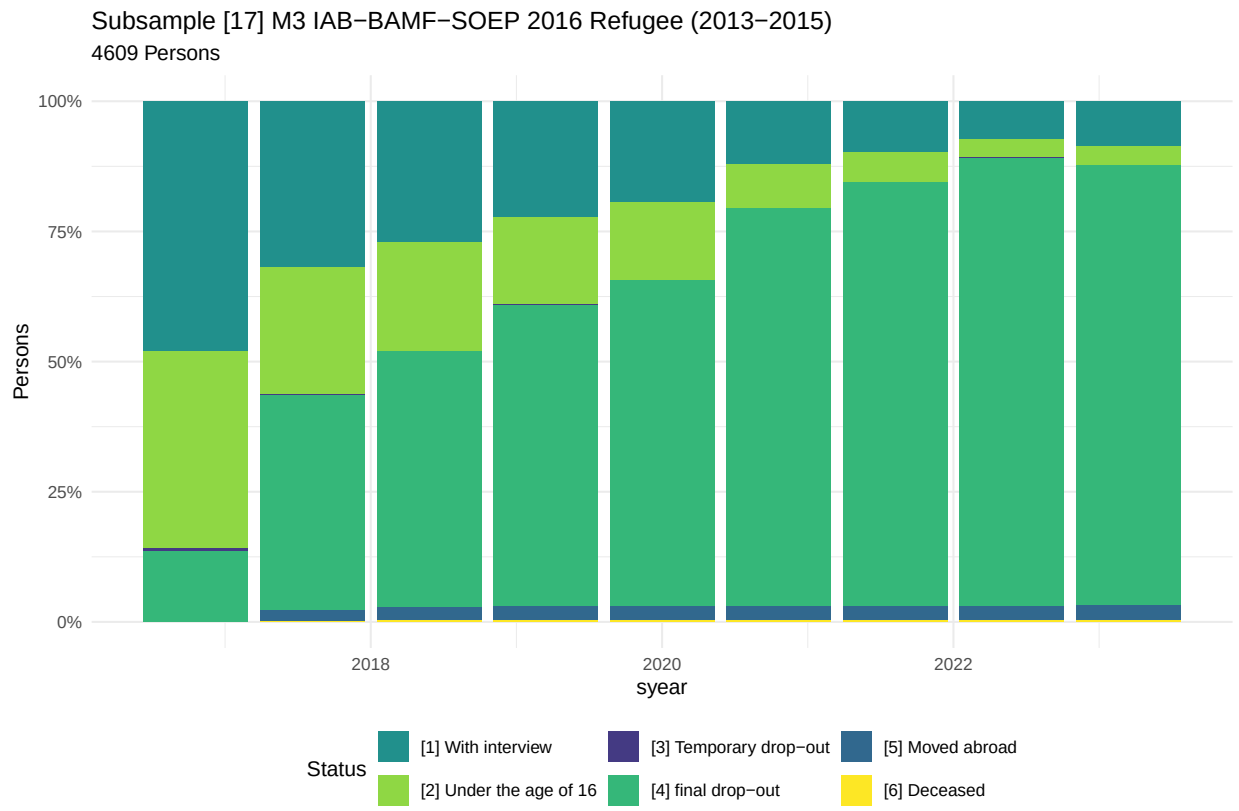

Figure 2.32.: First-Wave Persons and their Participation Behavior in Sample M3.

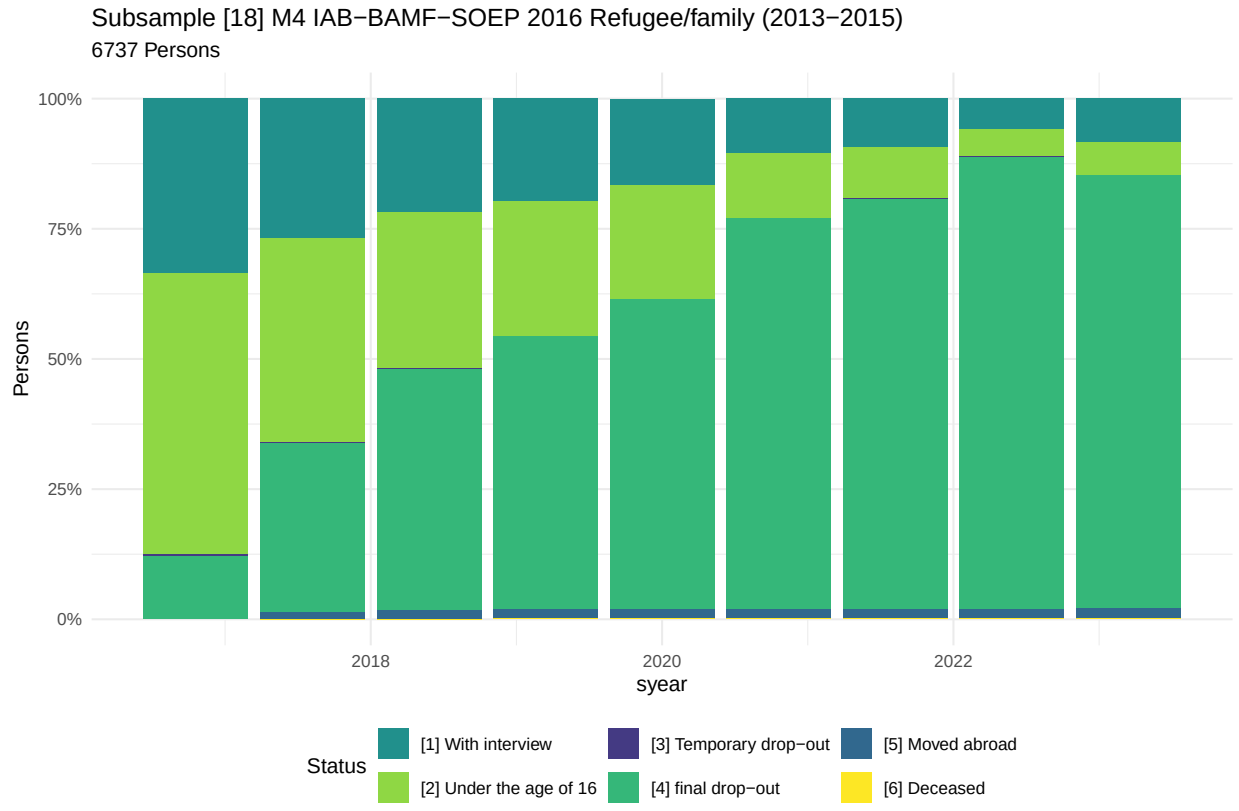

Figure 2.33.: First-Wave Persons and their Participation Behavior in Sample M4.

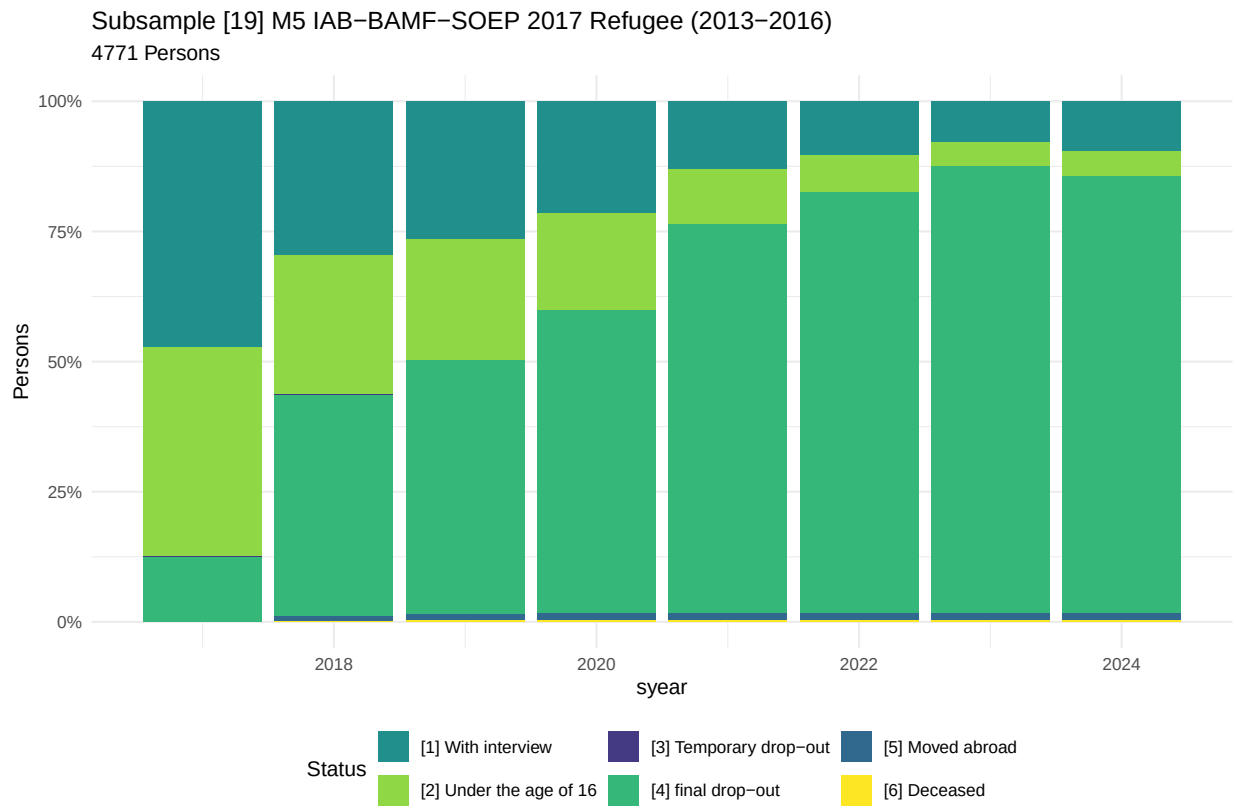

Figure 2.34.: First-Wave Persons and their Participation Behavior in Sample M5.

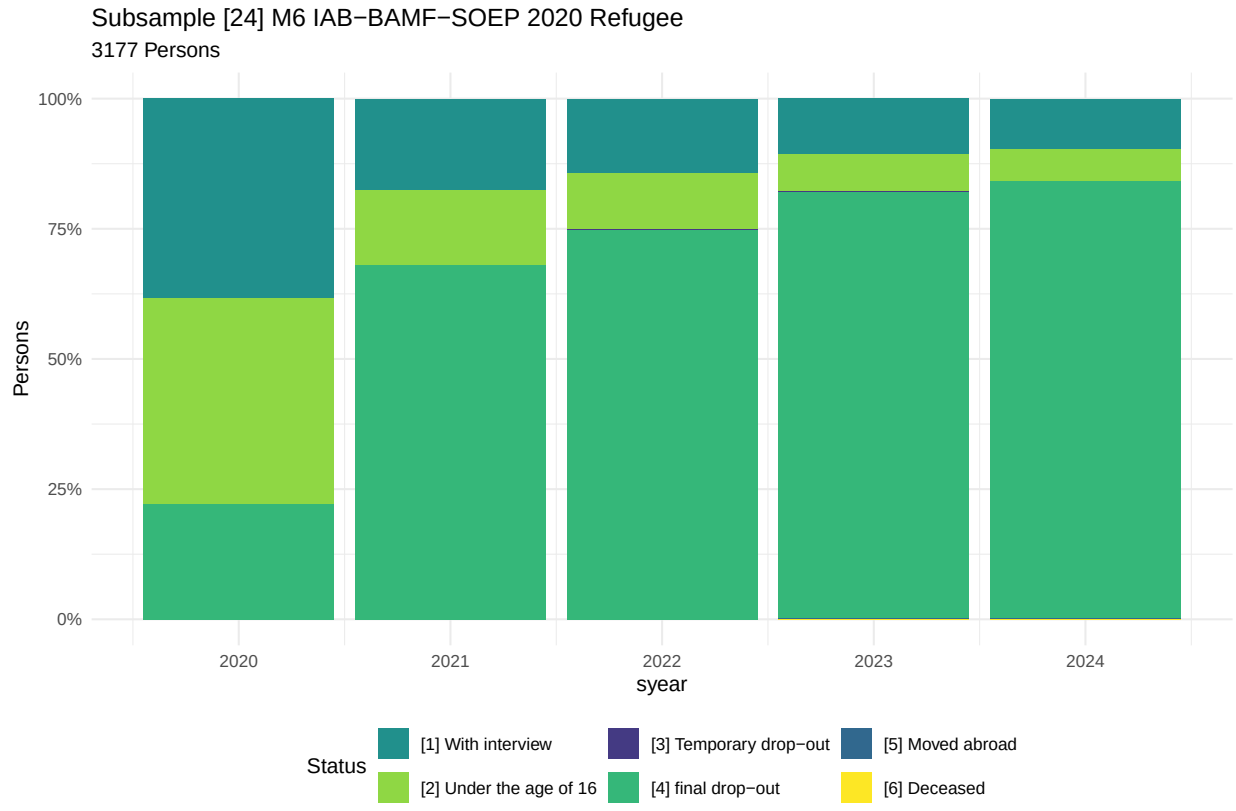

Figure 2.35.: First-Wave Persons and their Participation Behavior in Sample M6.

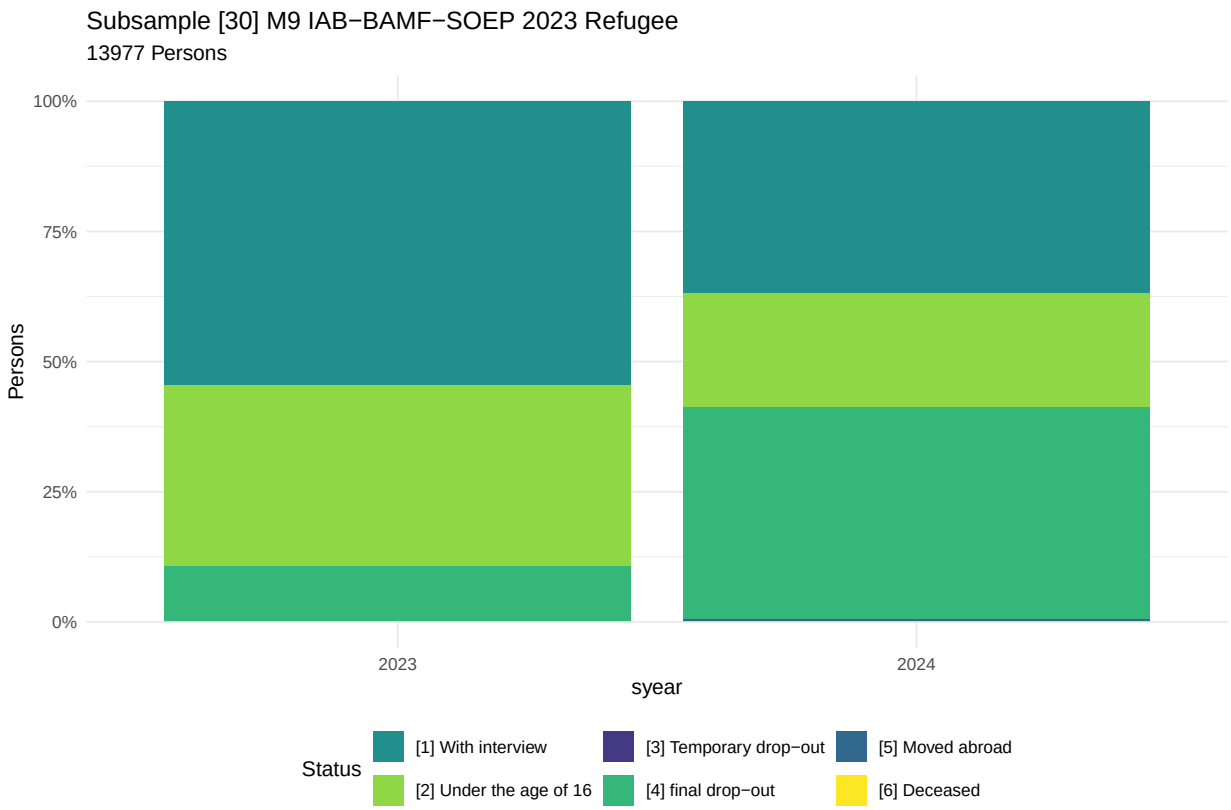

Figure 2.36.: First-Wave Persons and their Participation Behavior in Sample M9.

2.4. New Entrants and their Participation Behavior

In this Section we provide details on the participation behavior of the non-original sample members and their entrance to the ongoing survey. We distinguish between continuation of participation, exits due to survey unrelated attrition, and exits due to survey-related attrition. The number of non-original sample members increases over time and their number for the survey year 2024 is provided in the figure's subtitle.

2.4.1. SOEP-Core

The following figures, starting with Figure 2.37, display the participation behavior of the non-original sample members of SOEP-Core.

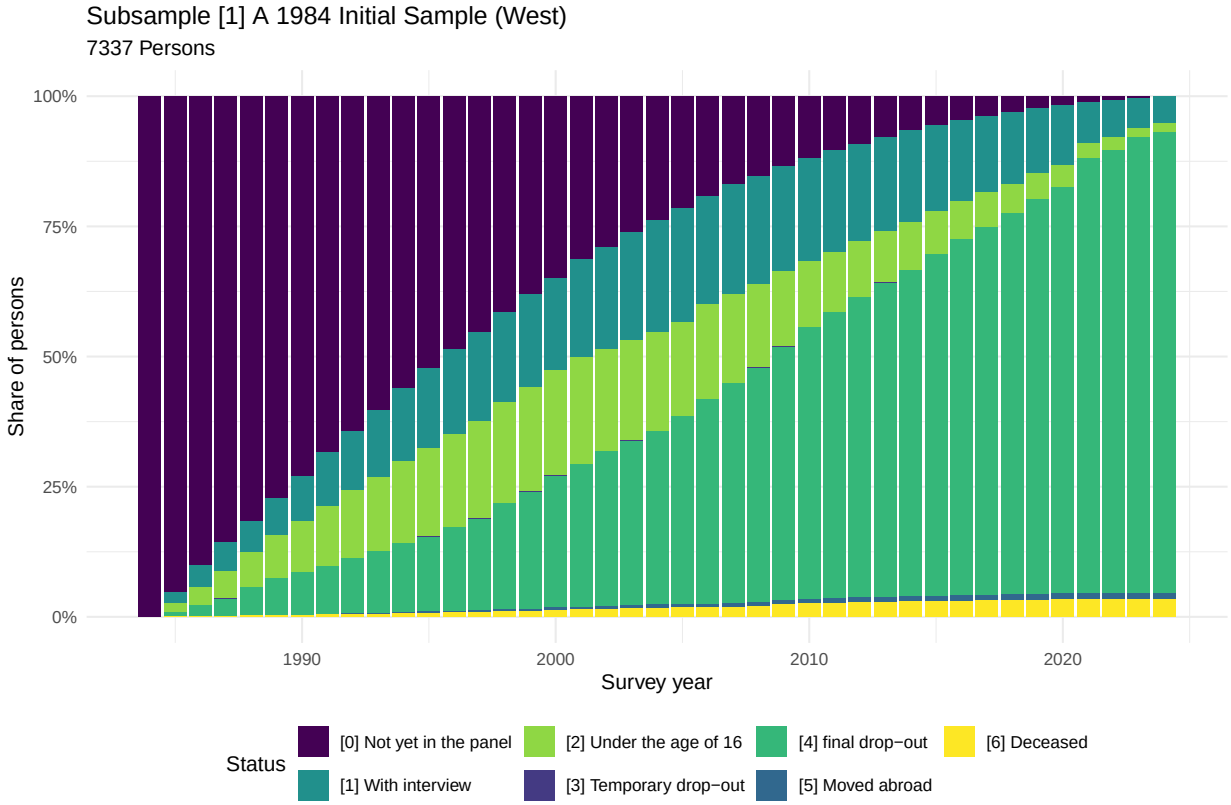

Figure 2.37.: Entrants and their Participation Behavior in Sample A.

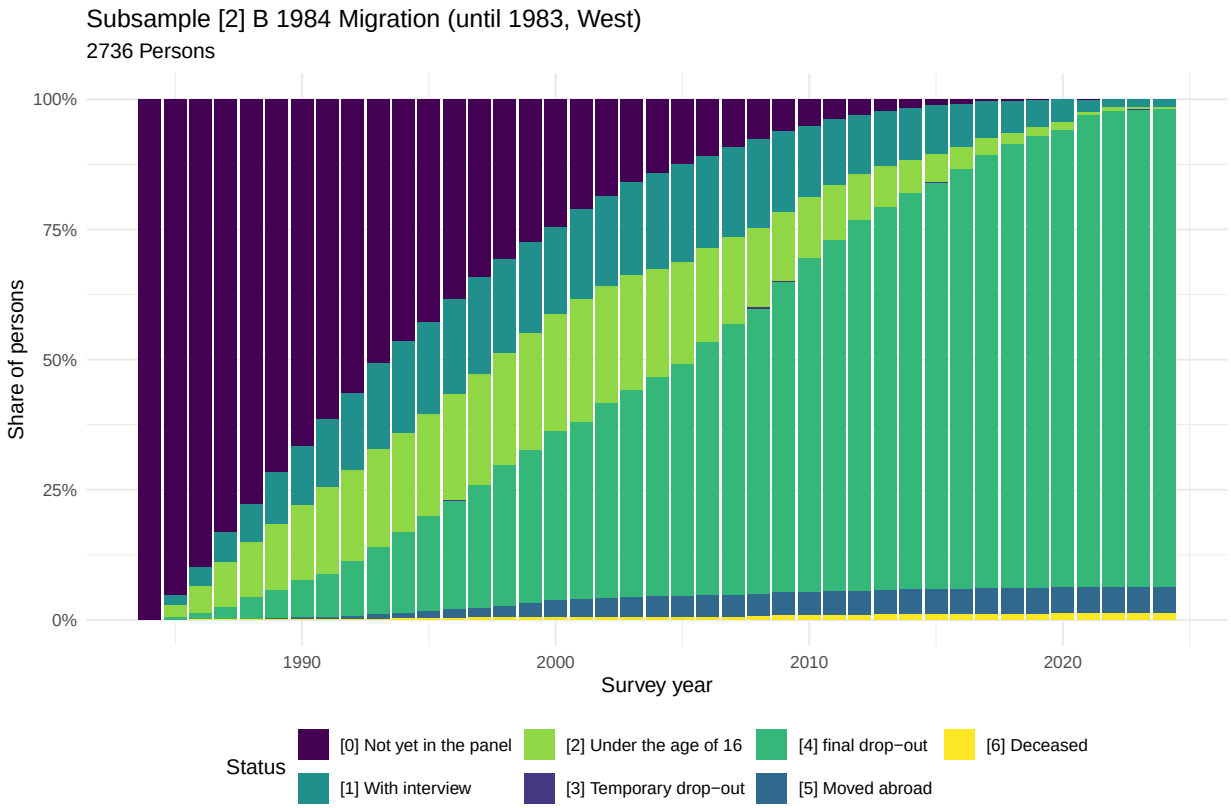

Figure 2.38.: Entrants and their Participation Behavior in Sample B.

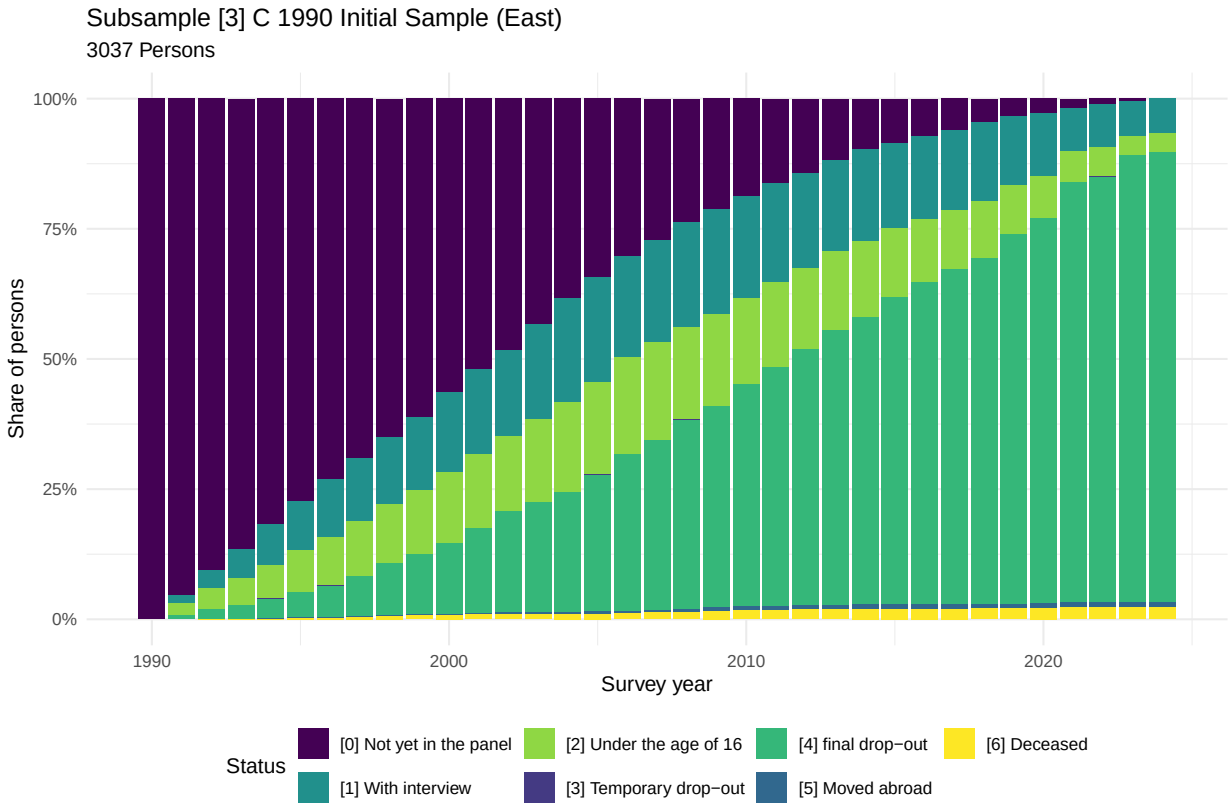

Figure 2.39.: Entrants and their Participation Behavior in Sample C.

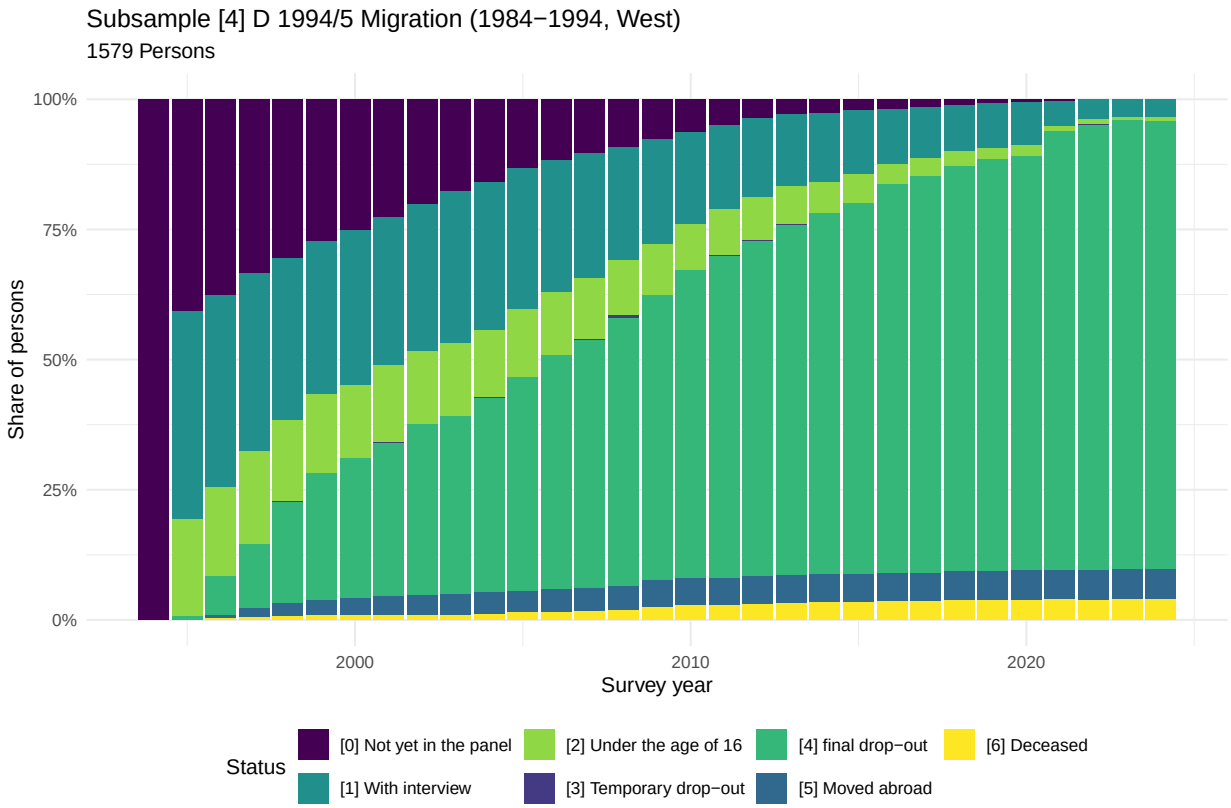

Figure 2.40.: Entrants and their Participation Behavior in Sample D.

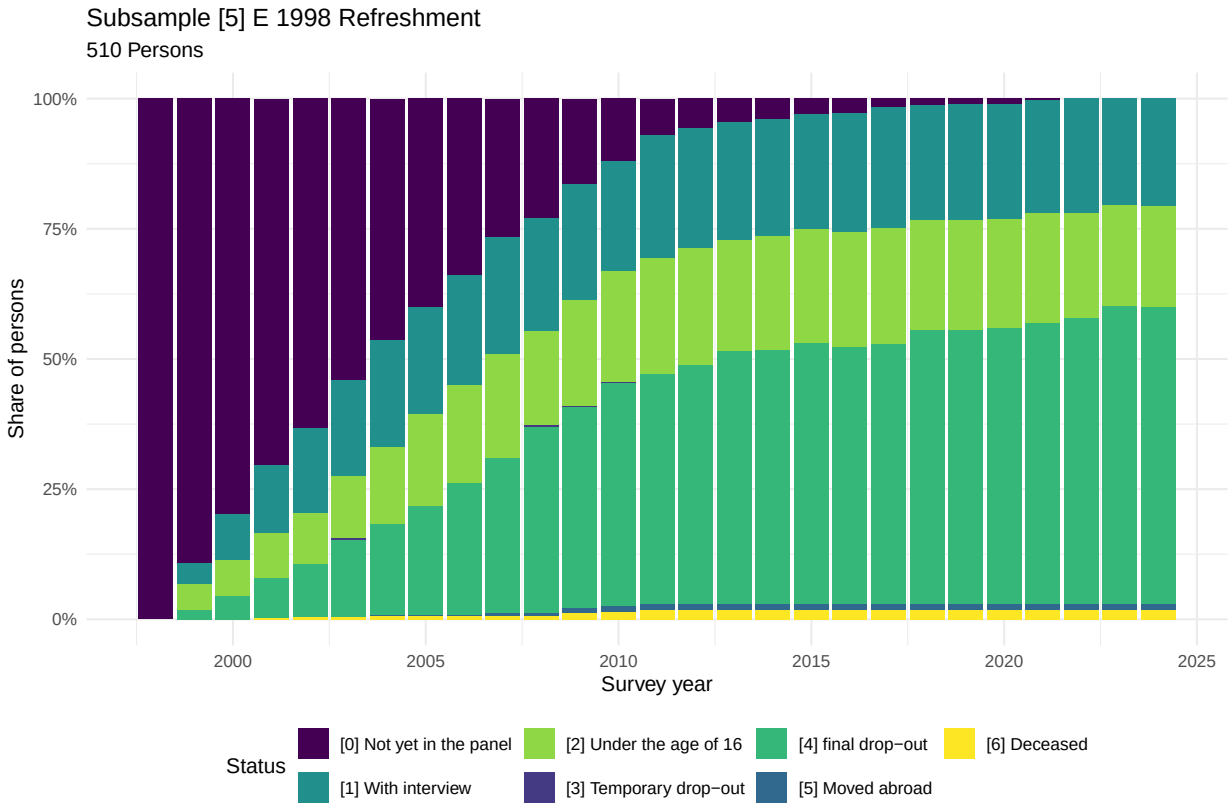

Figure 2.41.: Entrants and their Participation Behavior in Sample E.

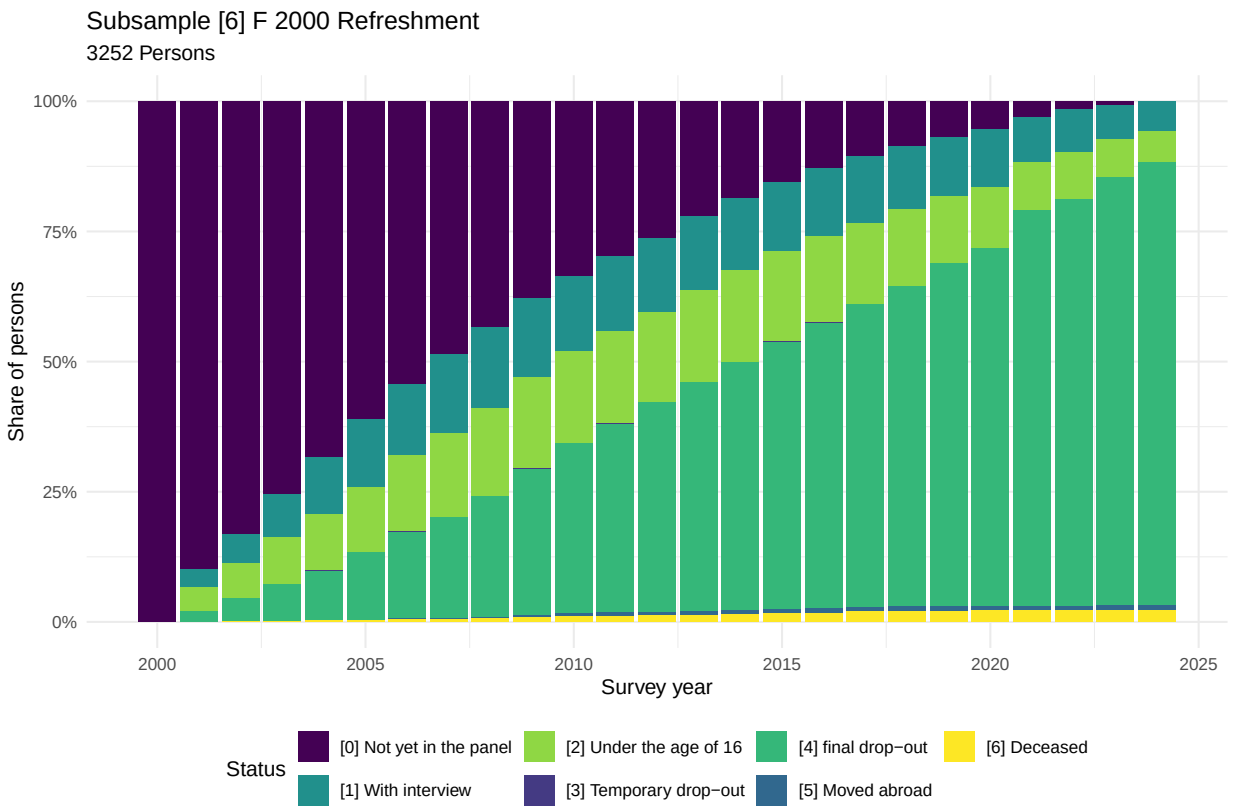

Figure 2.42.: Entrants and their Participation Behavior in Sample F.

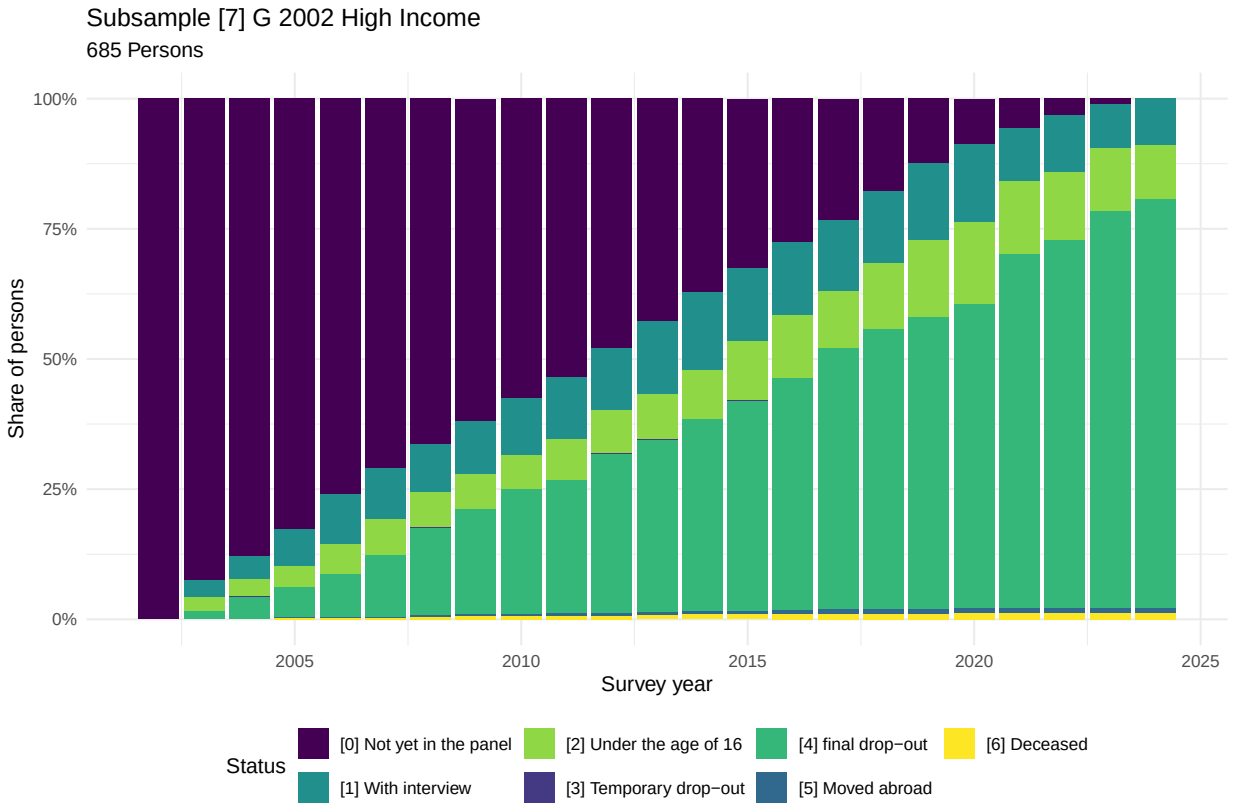

Figure 2.43.: Entrants and their Participation Behavior in Sample G.

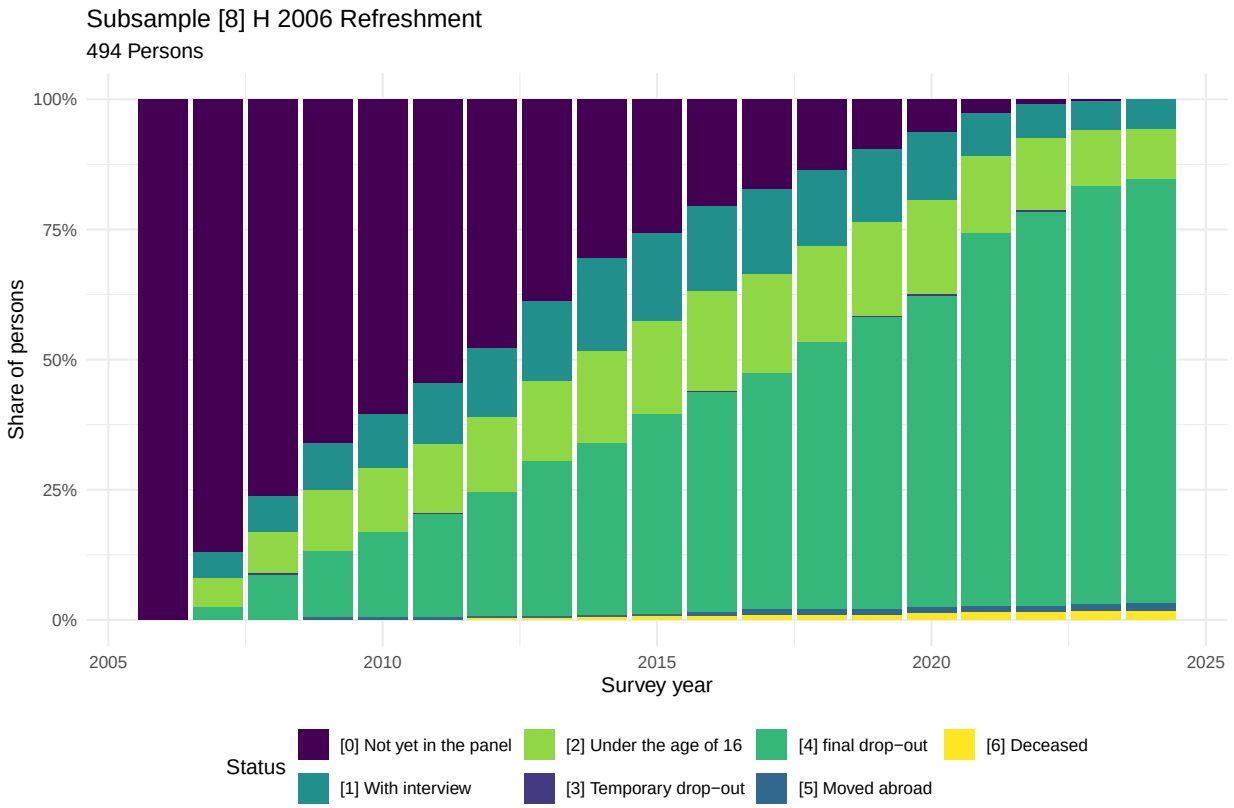

Figure 2.44.: Entrants and their Participation Behavior in Sample H.

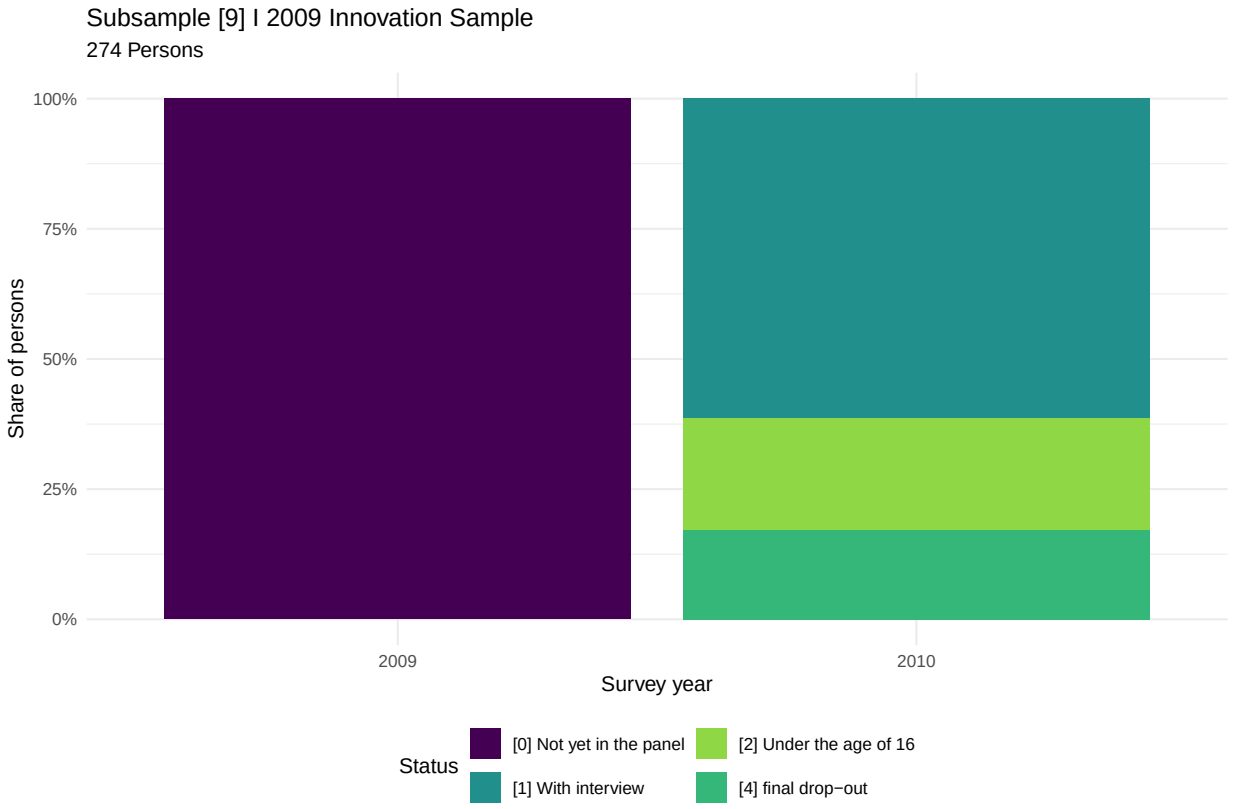

Figure 2.45.: Entrants and their Participation Behavior in Sample I.

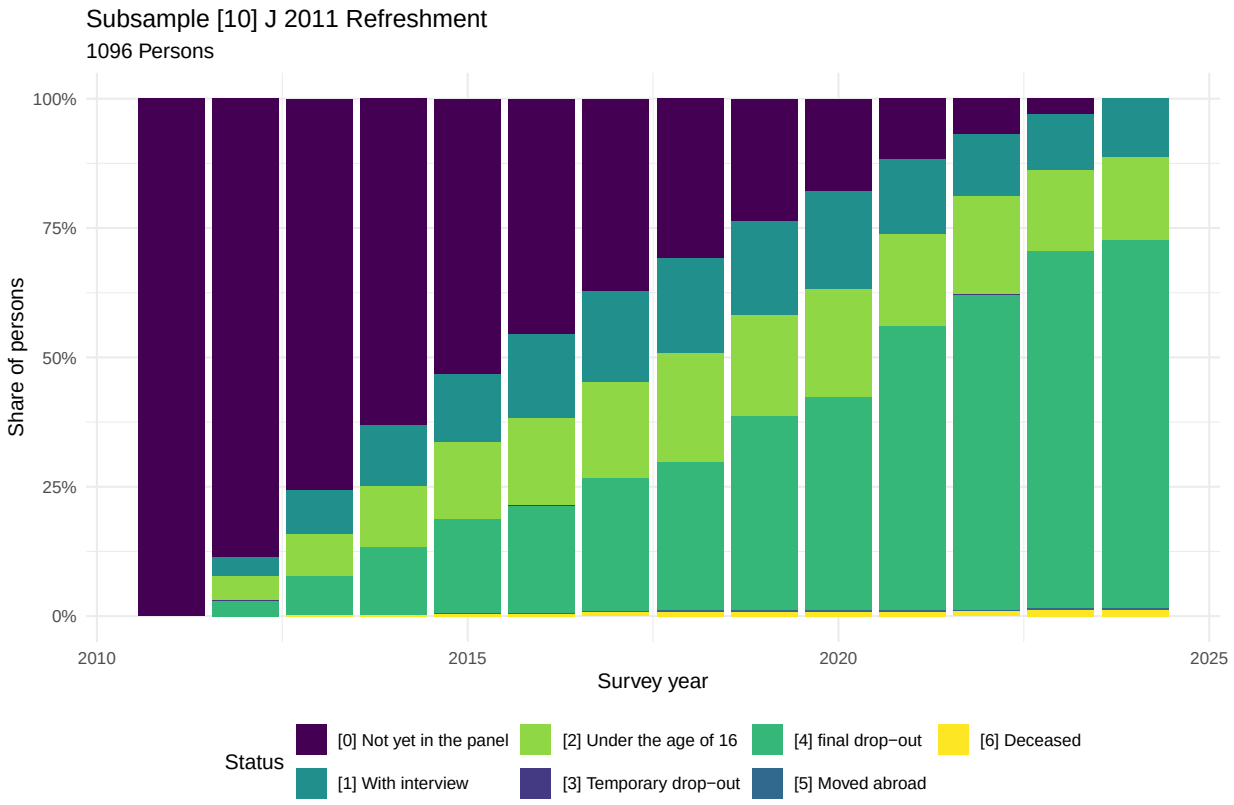

Figure 2.46.: Entrants and their Participation Behavior in Sample J.

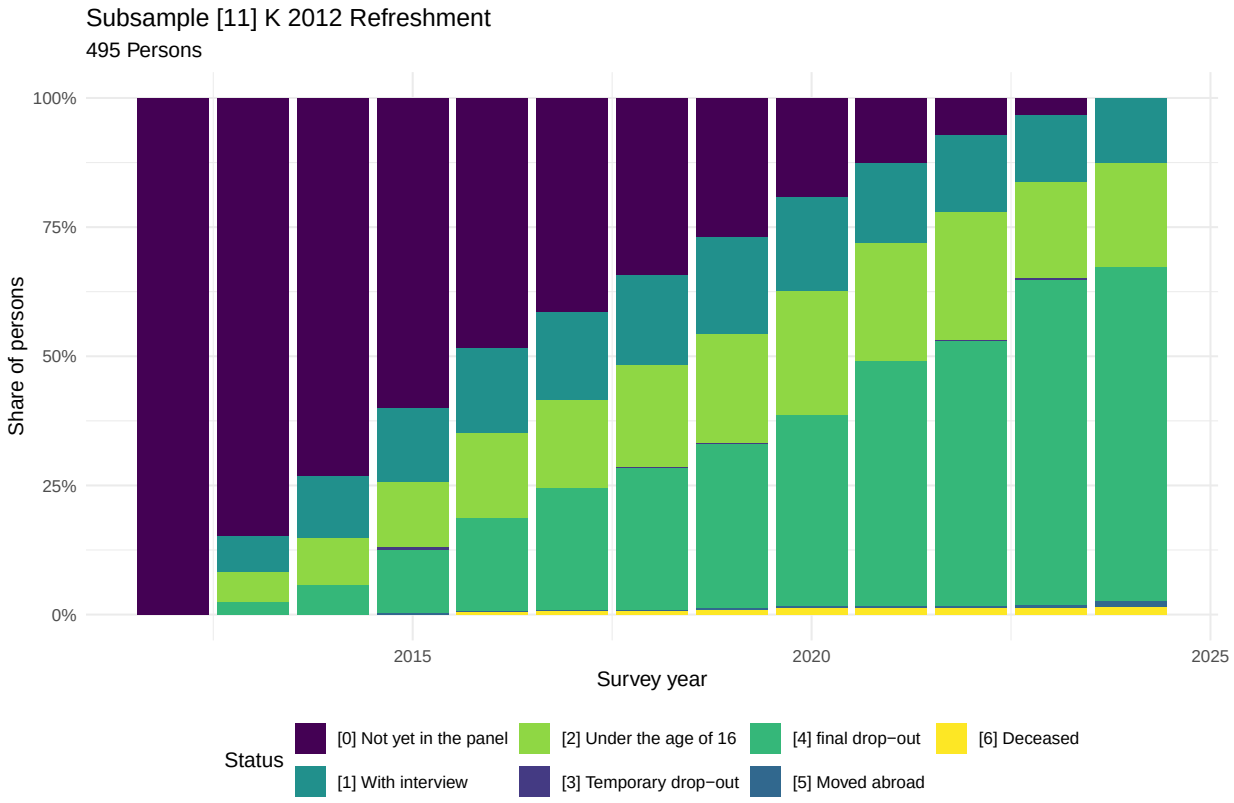

Figure 2.47.: Entrants and their Participation Behavior in Sample K.

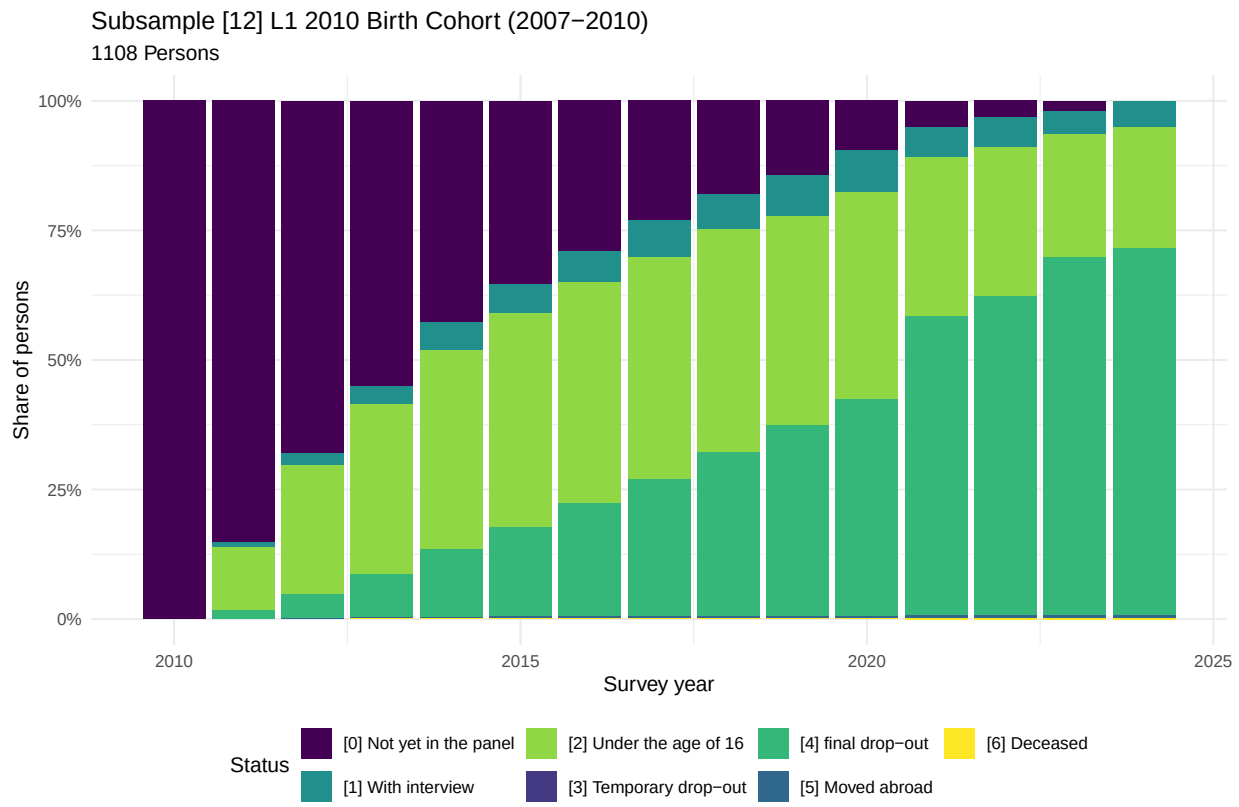

Figure 2.48.: Entrants and their Participation Behavior in Sample L1.

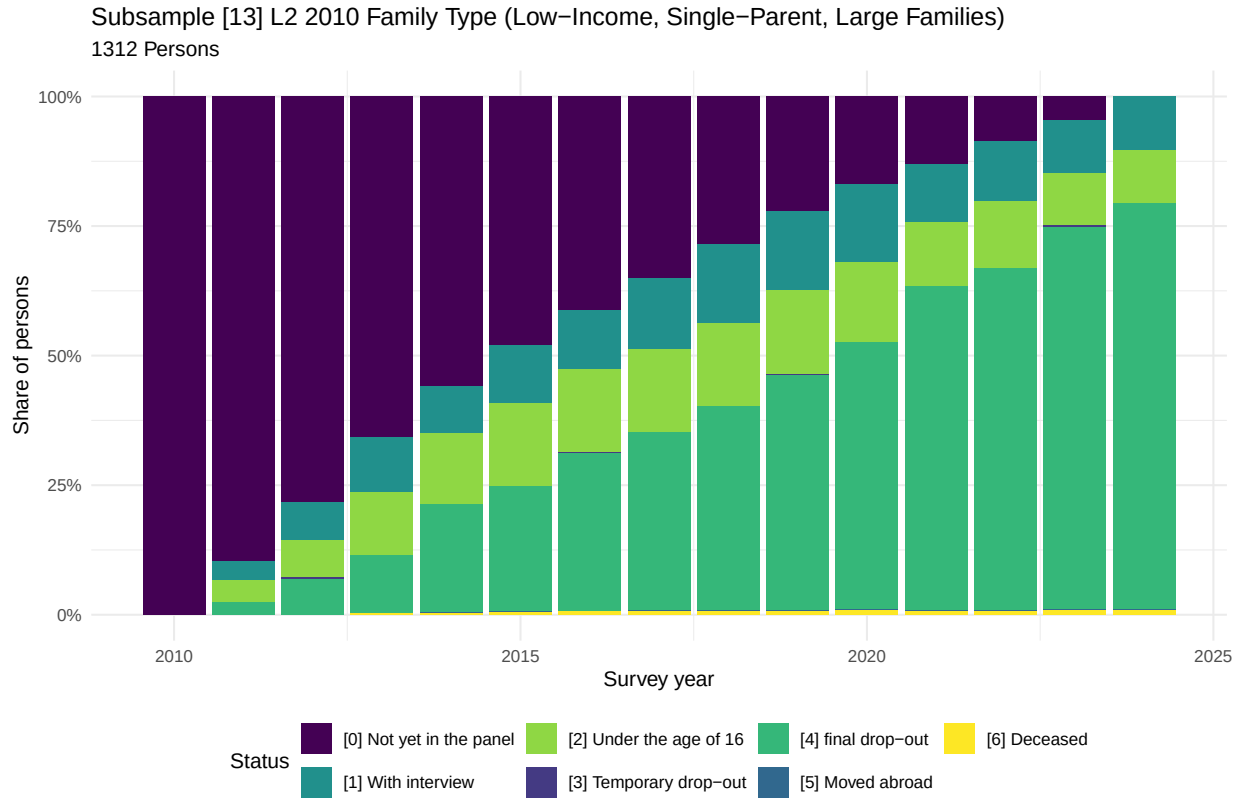

Figure 2.49.: Entrants and their Participation Behavior in Sample L2.

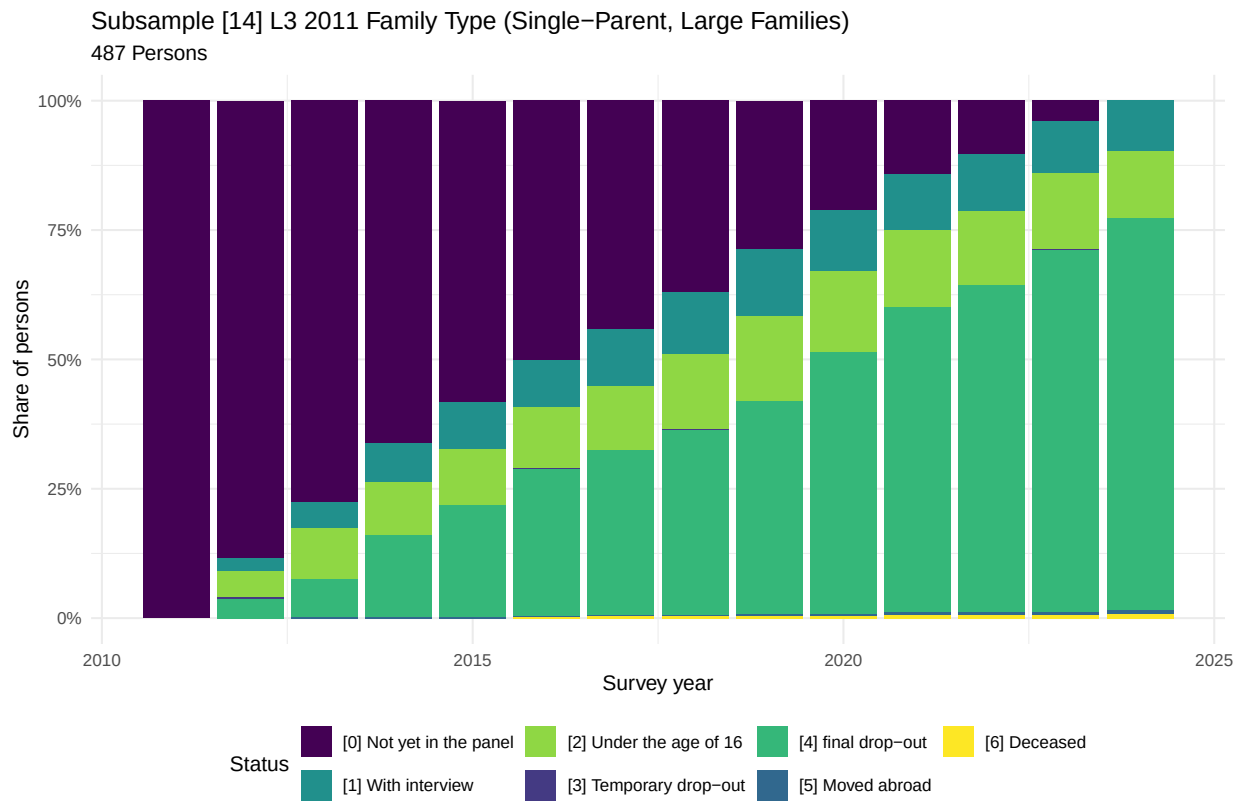

Figure 2.50.: Entrants and their Participation Behavior in Sample L3.

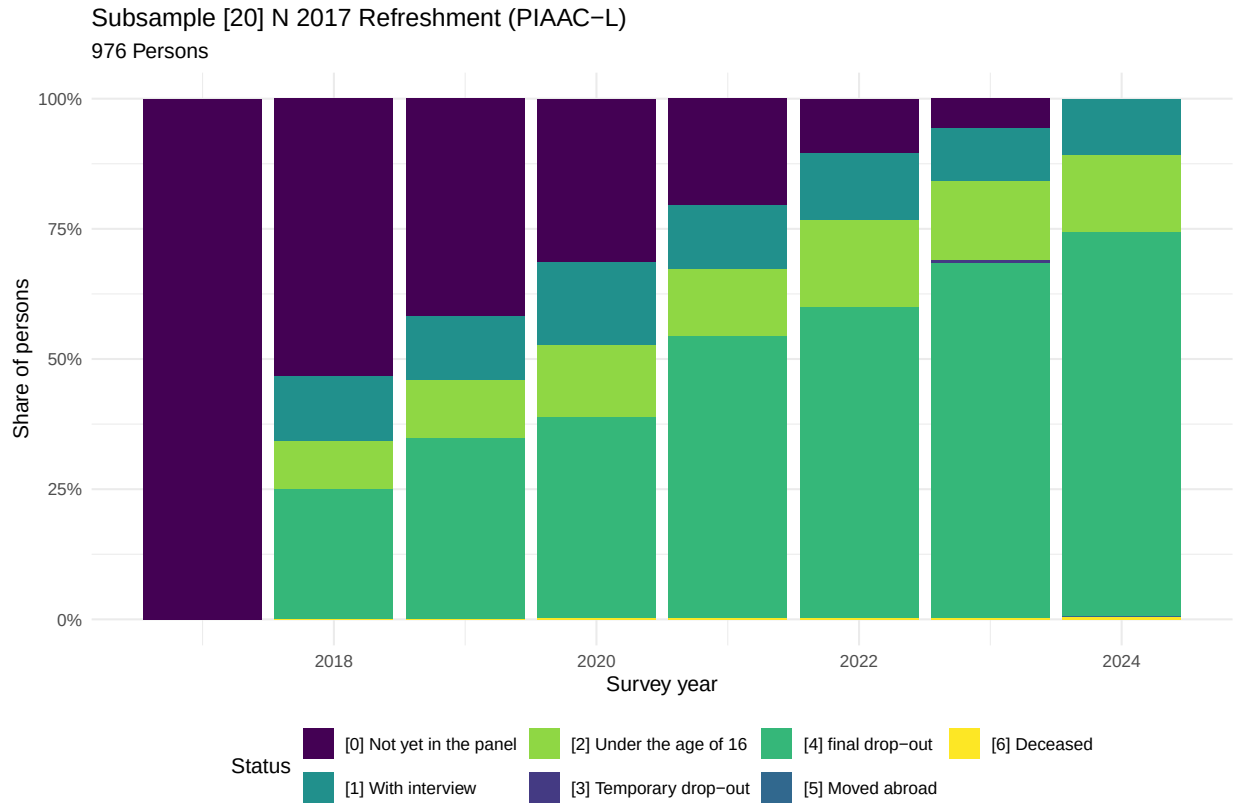

Figure 2.51.: Entrants and their Participation Behavior in Sample N.

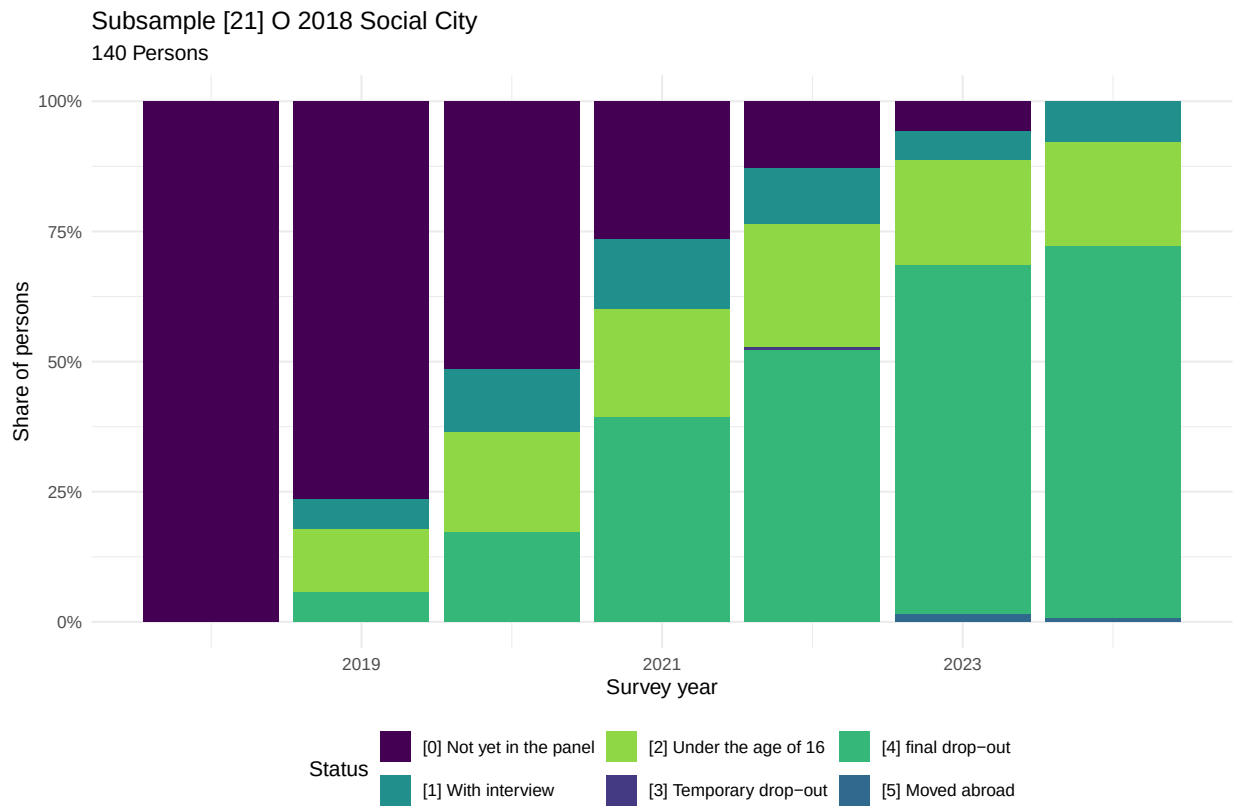

Figure 2.52.: Entrants and their Participation Behavior in Sample O.

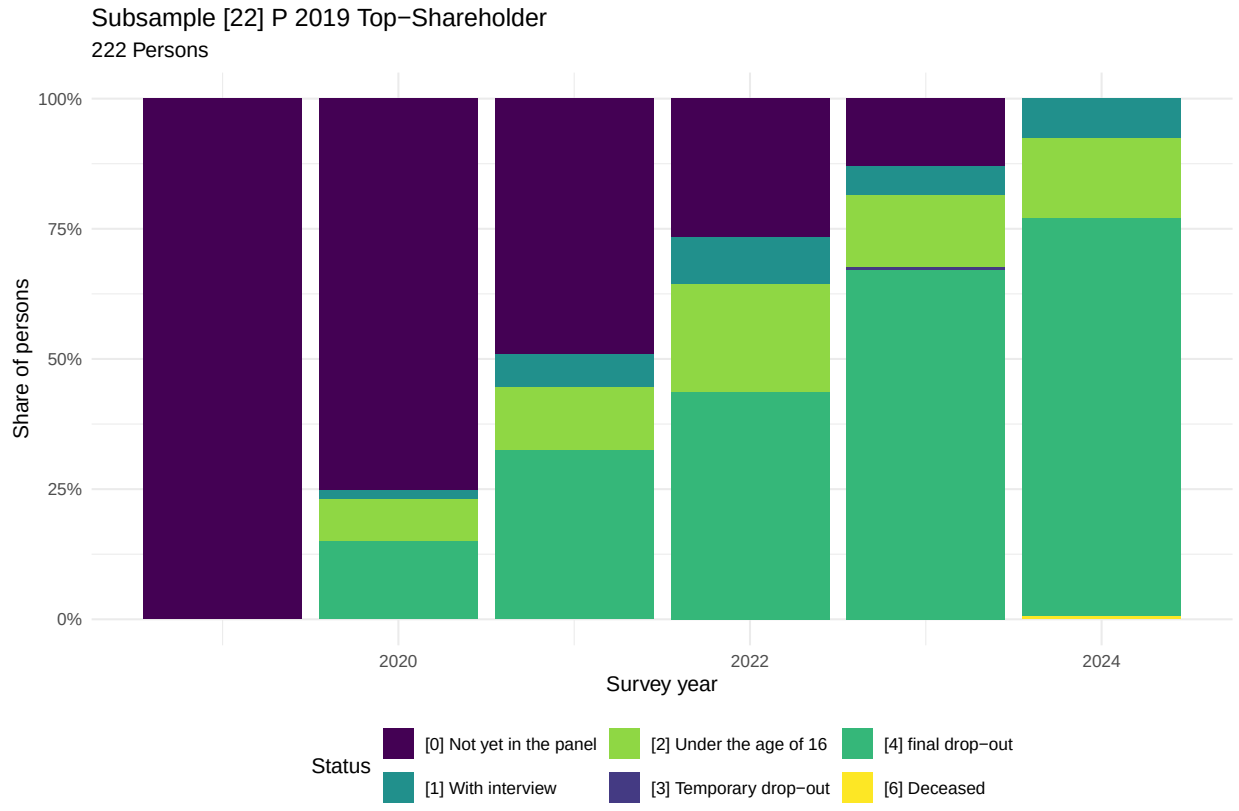

Figure 2.53.: Entrants and their Participation Behavior in Sample P.

Figure 2.54.: Entrants and their Participation Behavior in Sample Q.

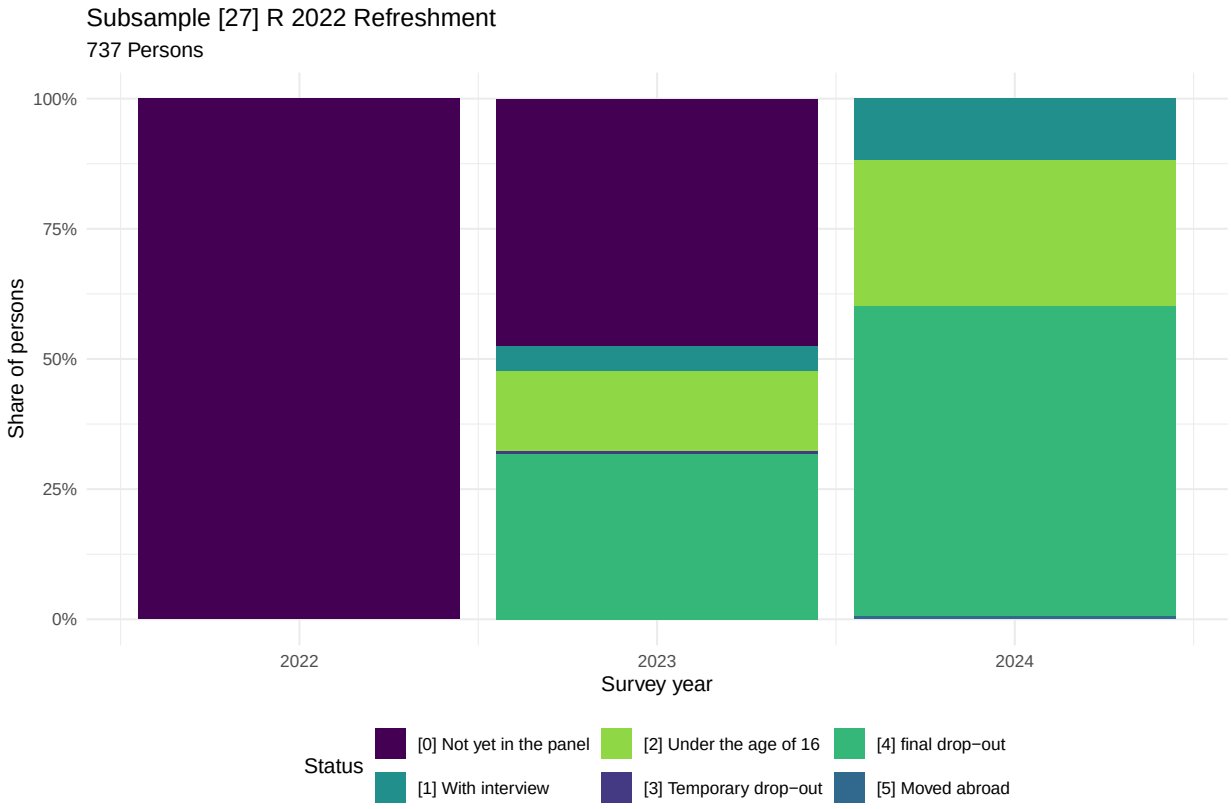

Figure 2.55.: Entrants and their Participation Behavior in Sample R.

2.4.2. IAB-SOEP Migration Sample

The following figures, starting with Figure 2.56, display the participation behavior of the non-original sample members in the IAB-SOEP Migration Sample.

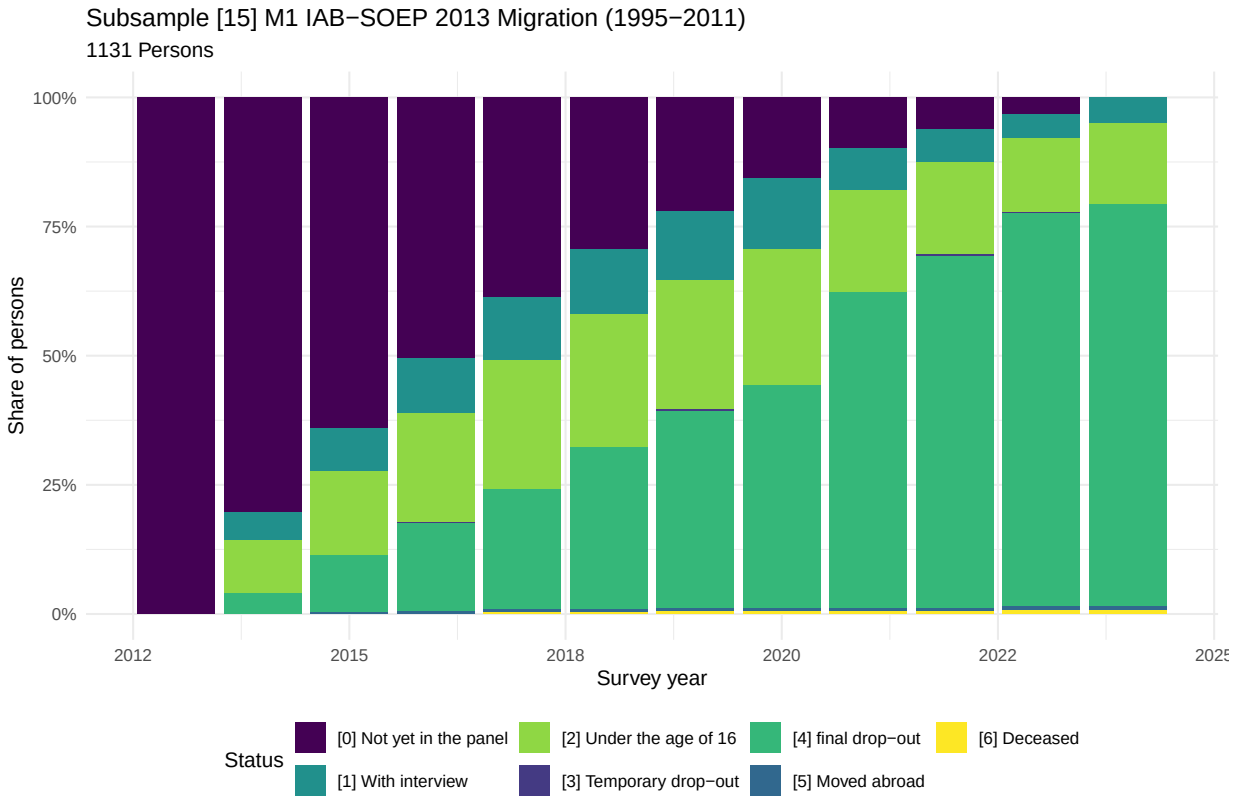

Figure 2.56.: Entrants and their Participation Behavior in Sample M1.

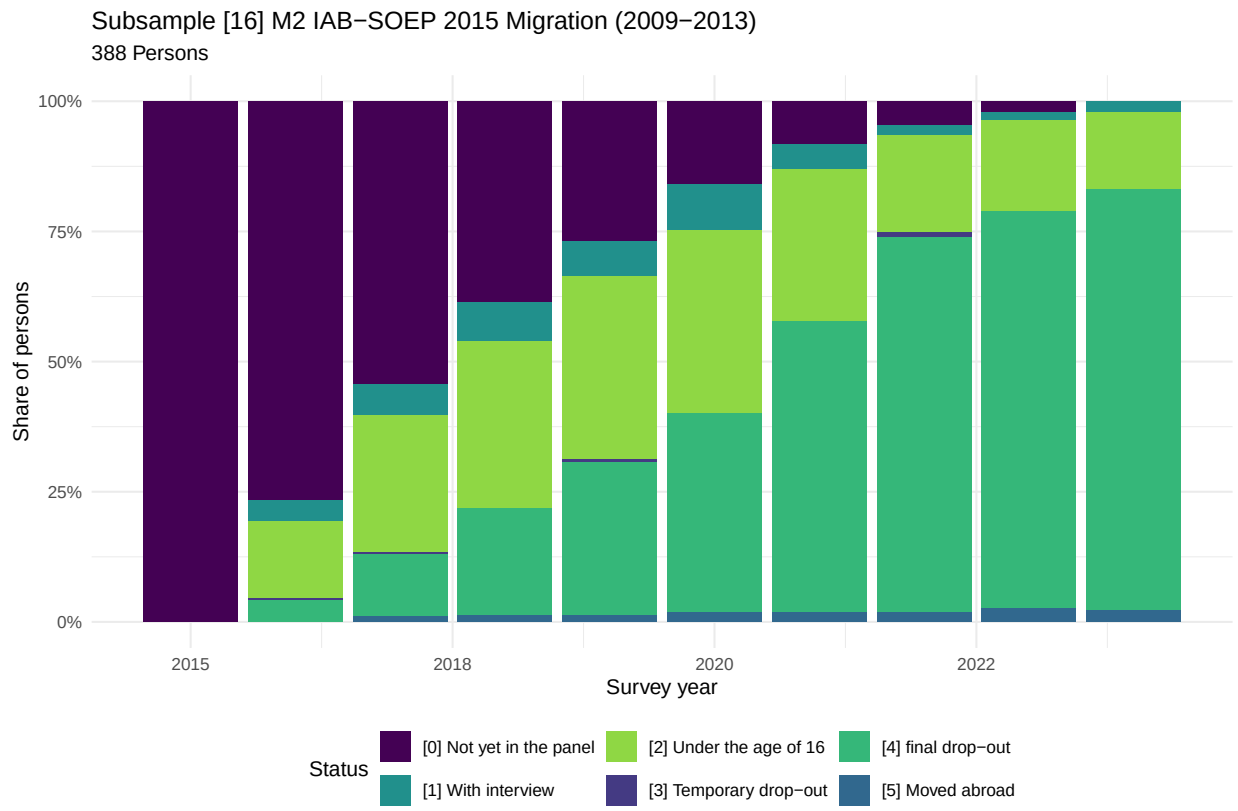

Figure 2.57.: Entrants and their Participation Behavior in Sample M2.

Figure 2.58.: Entrants and their Participation Behavior in Sample M7.

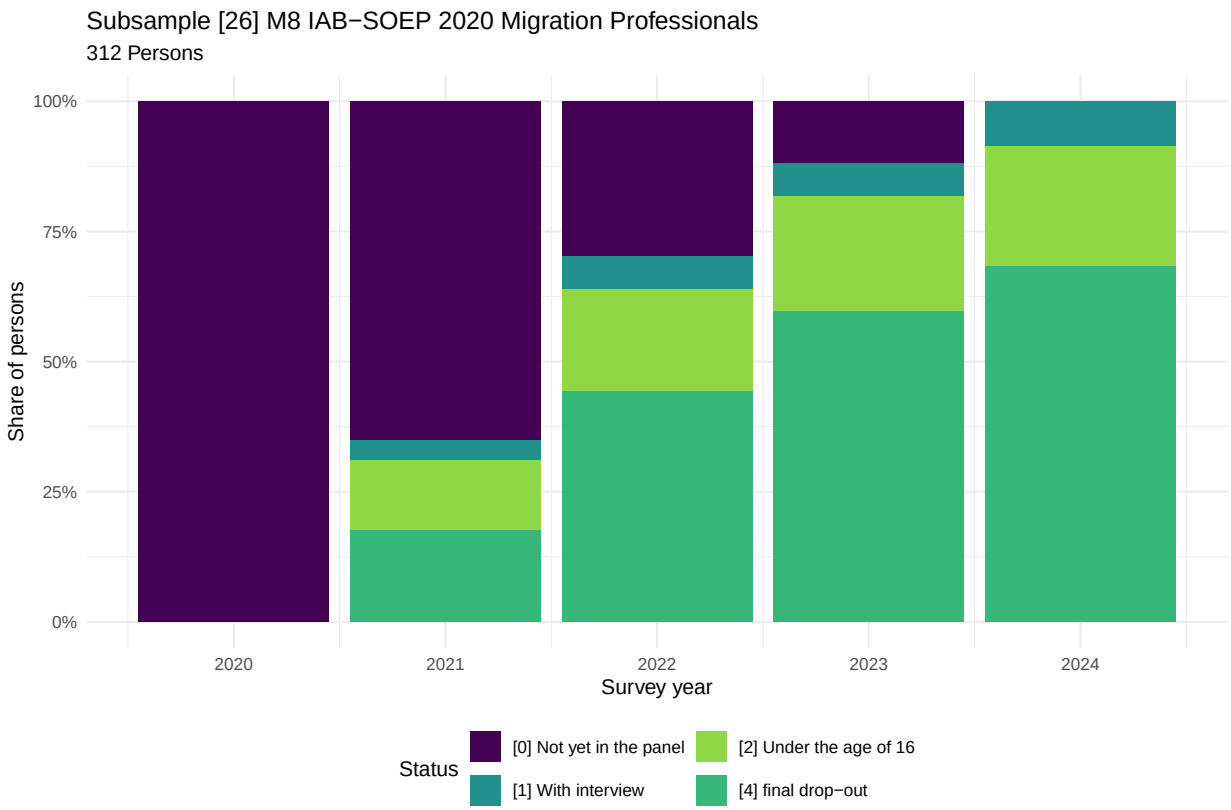

Figure 2.59.: Entrants and their Participation Behavior in Sample M8.

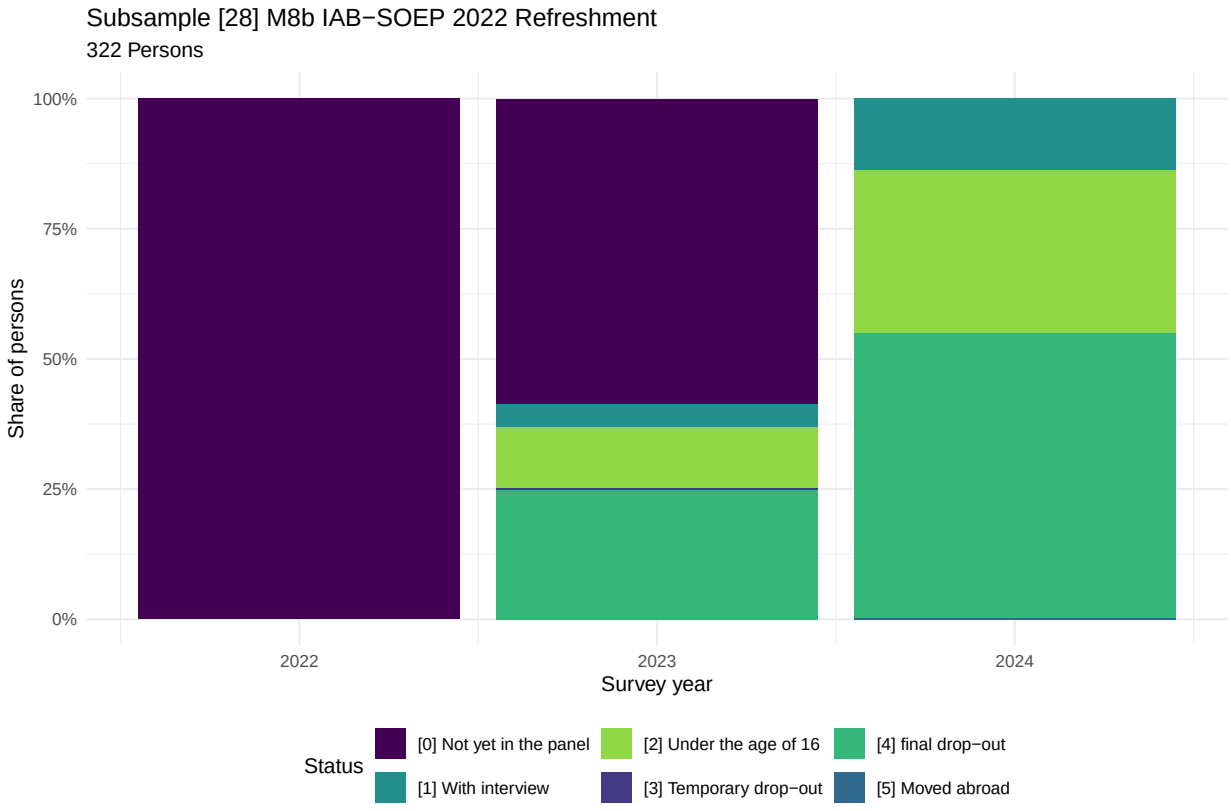

Figure 2.60.: Entrants and their Participation Behavior in Sample M8b.

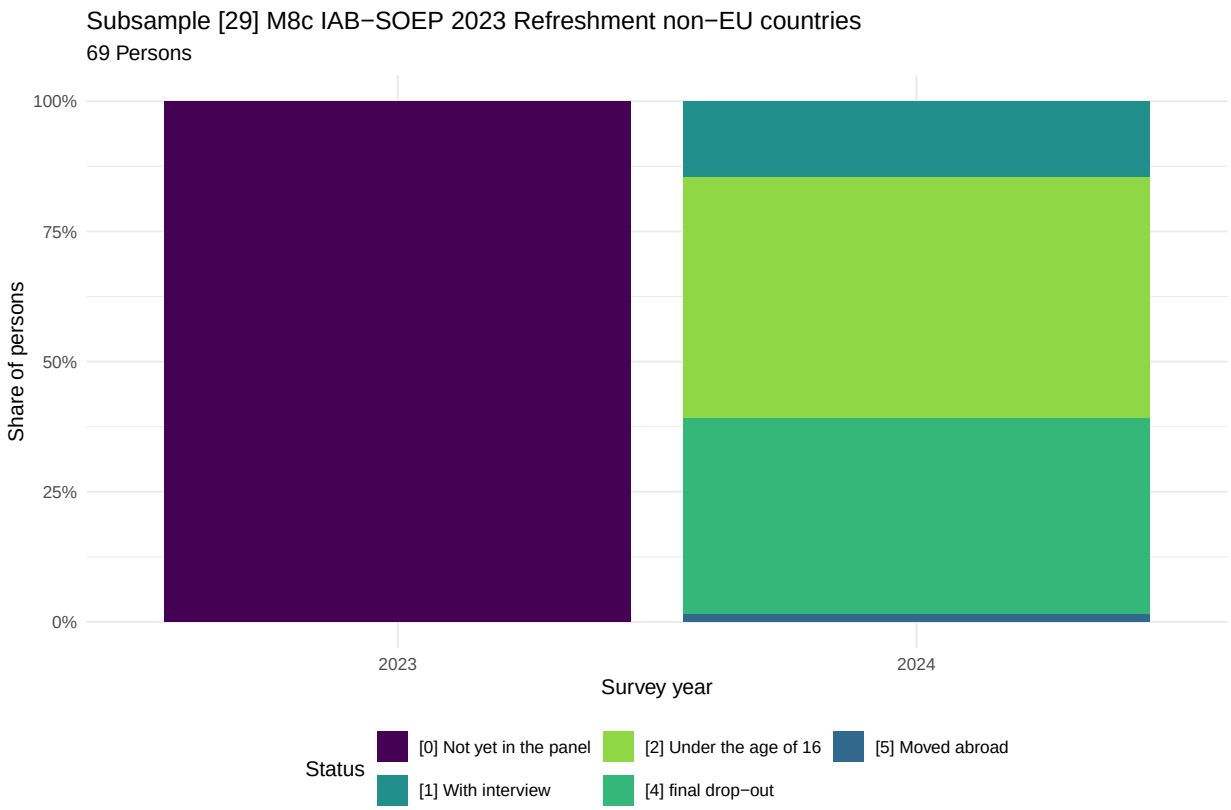

Figure 2.61.: Entrants and their Participation Behavior in Sample M8c.

2.4.3. IAB-BAMF-SOEP Survey of Refugees

The following figures, starting with Figure 2.62, display the participation behavior of the non-original sample members in the IAB-BAMF-SOEP Survey of Refugees.

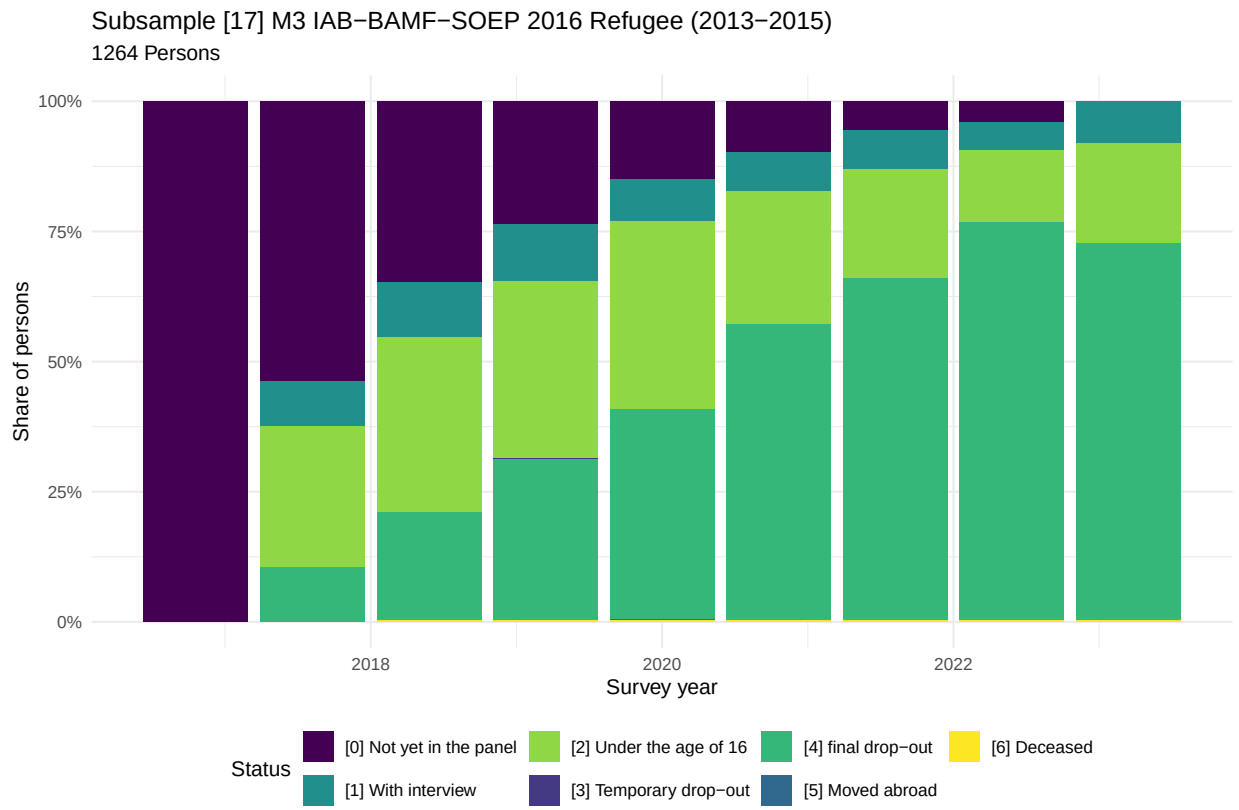

Figure 2.62.: Entrants and their Participation Behavior in Sample M3.

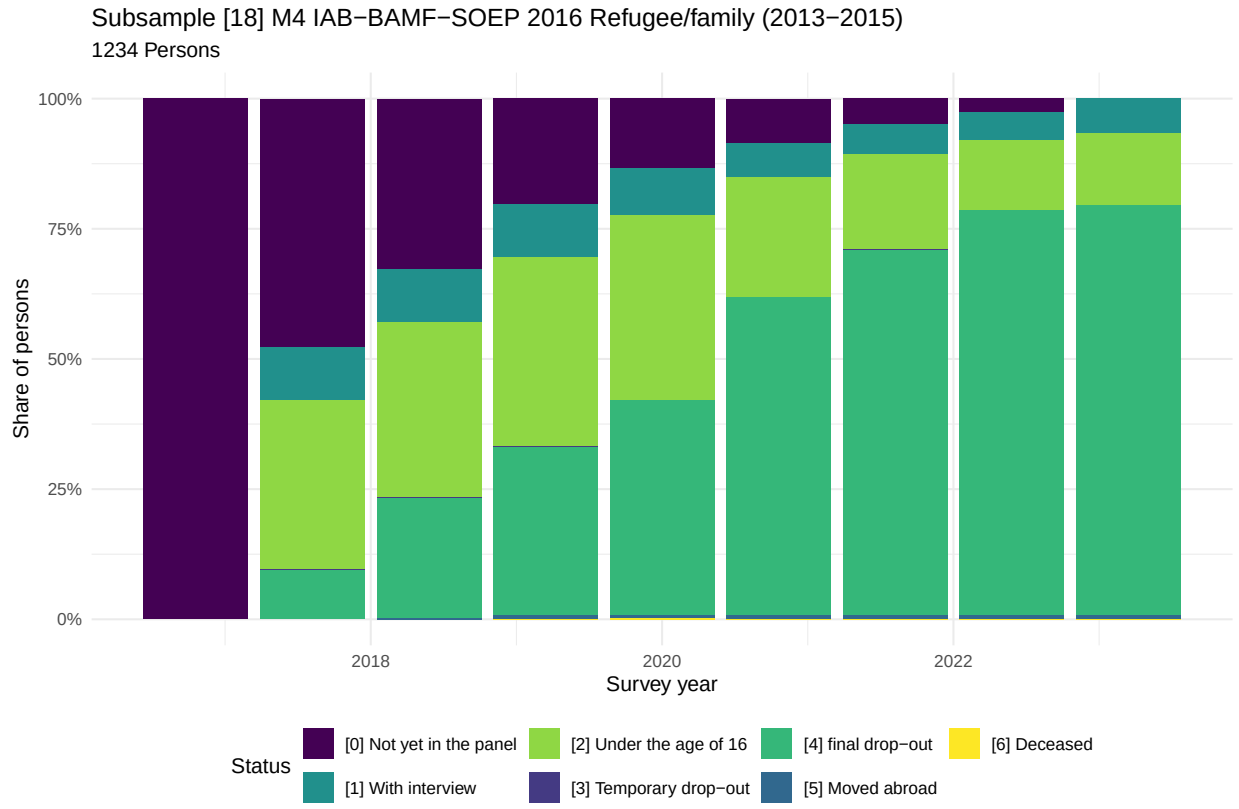

Figure 2.63.: Entrants and their Participation Behavior in Sample M4.

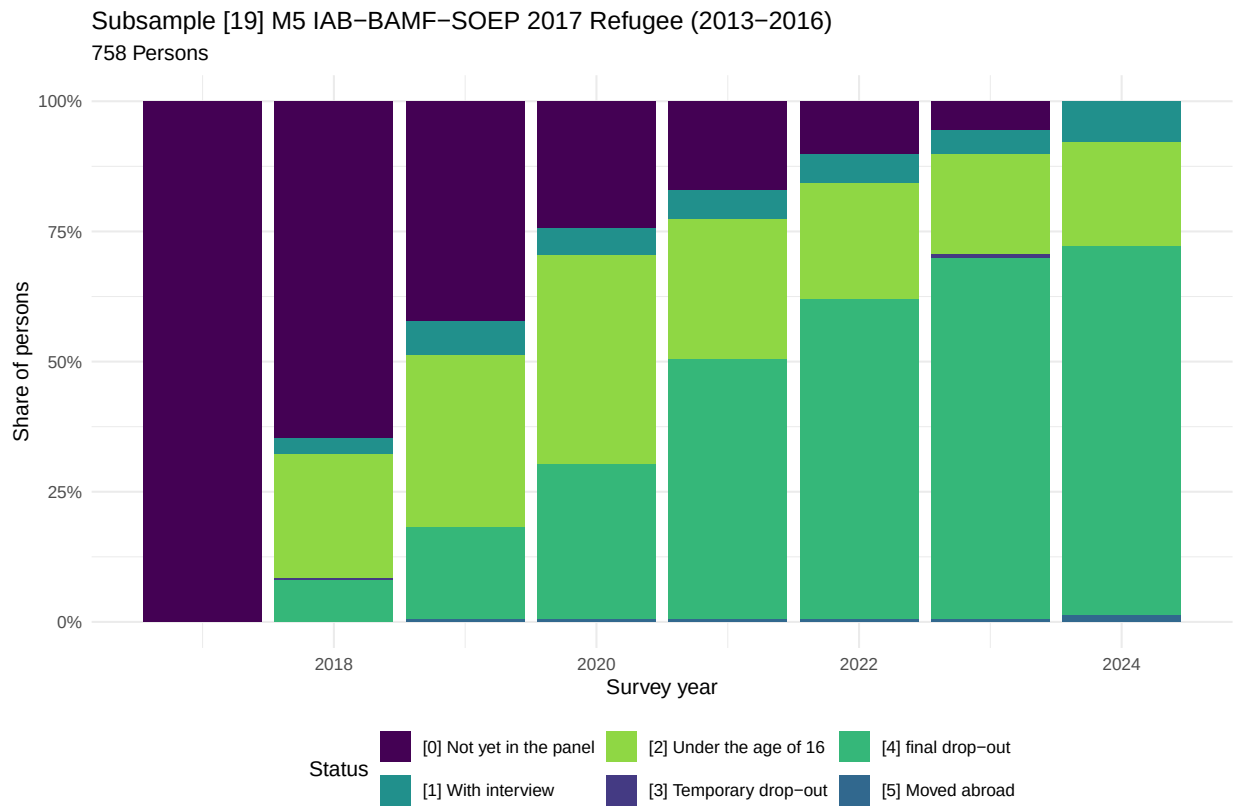

Figure 2.64.: Entrants and their Participation Behavior in Sample M5.

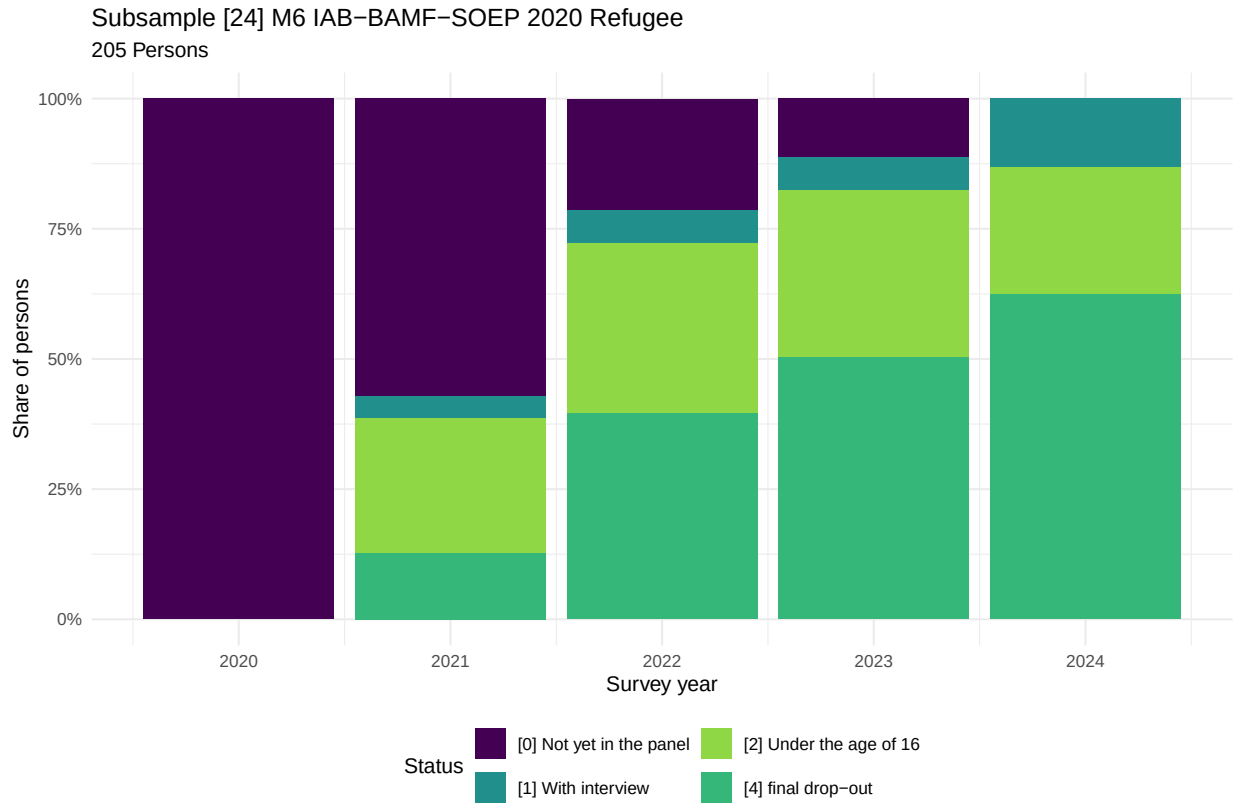

Figure 2.65.: Entrants and their Participation Behavior in Sample M6.

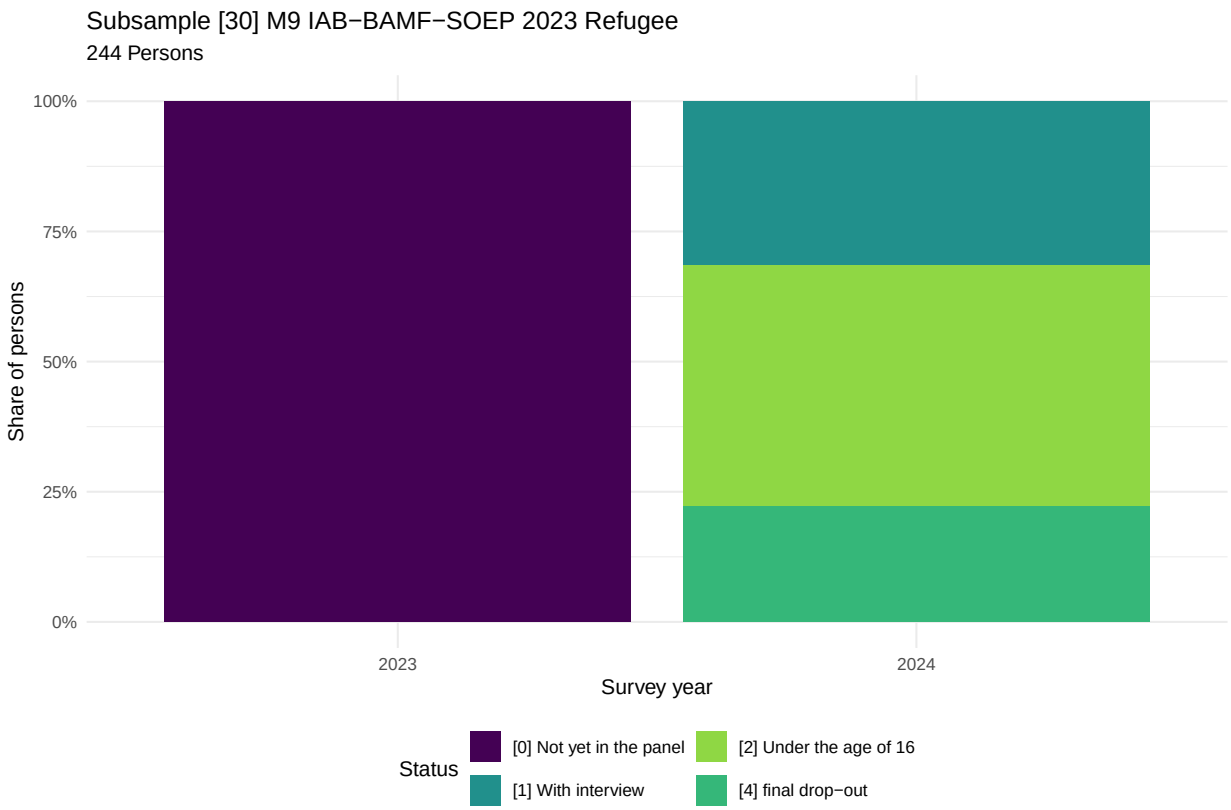

Figure 2.66.: Entrants and their Participation Behavior in Sample M9.

2.5. Original Households and Split-Offs

In case a household splits into multiple households (for instance, because a household member moves into another apartment), all resulting split-off households will be interviewed. The household that does not move keeps the initial household number. These households are referred to as an "original household". For detailed studies on the relevance of non-original sample members in the SOEP, see Schonlau, Watson, and Kroh (2011) and Spiess et al. (2008)

2.5.1. SOEP-Core

The following figures, starting with Figure 2.67, display the development of the share of original households for each sample of SOEP-Core.

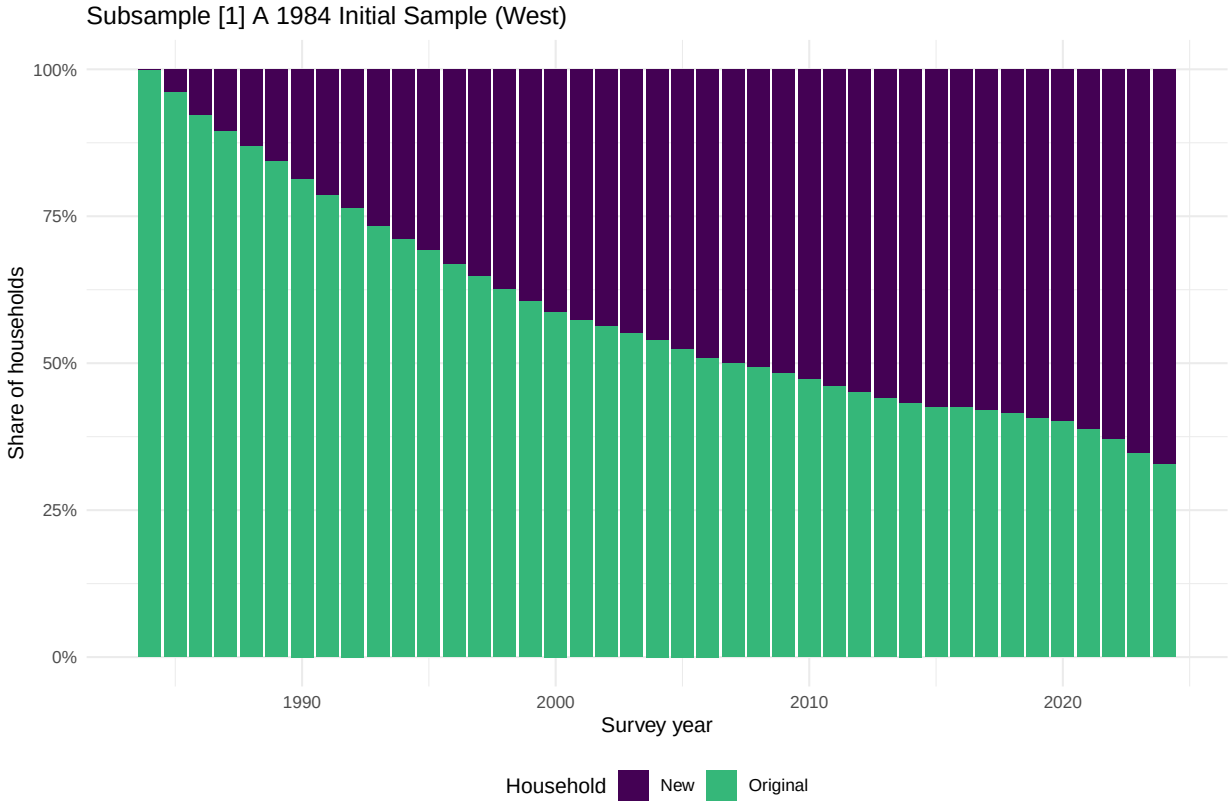

Figure 2.67.: Proportion of First-Wave and New Households in Sample A.

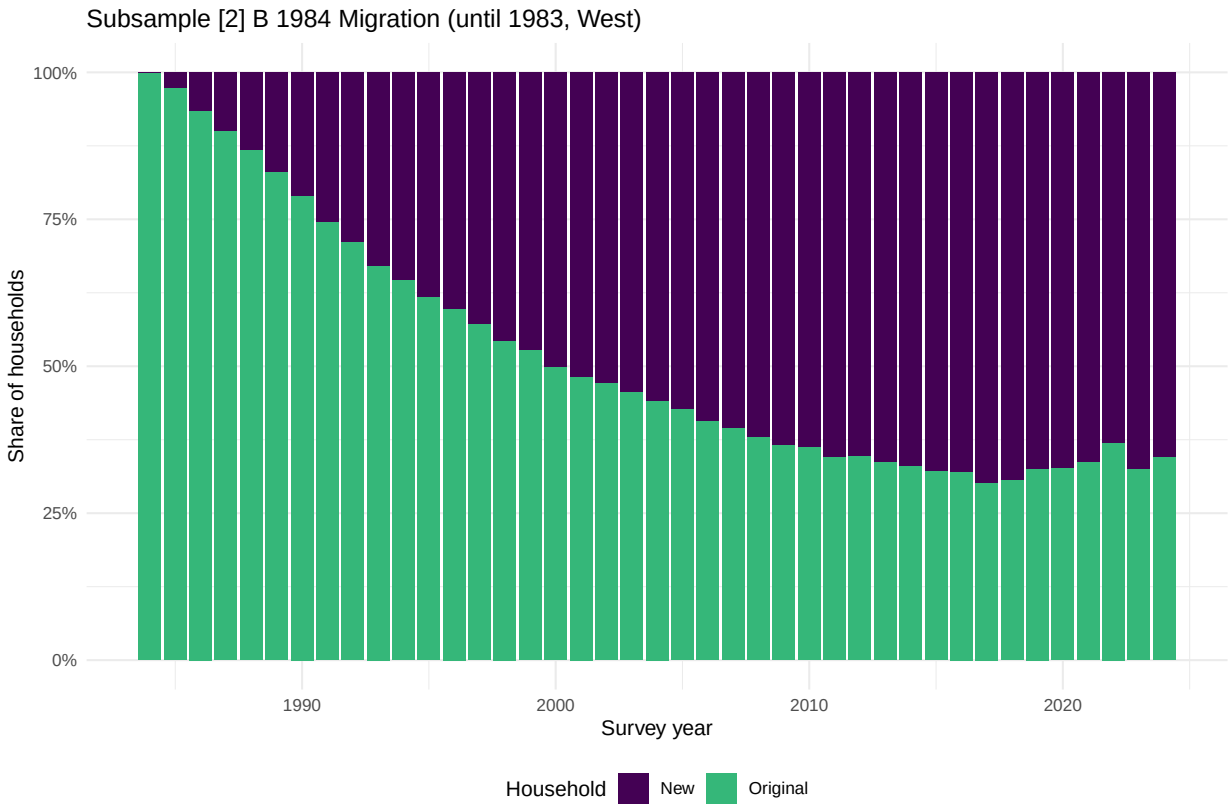

Figure 2.68.: Proportion of First-Wave and New Households in Sample B.

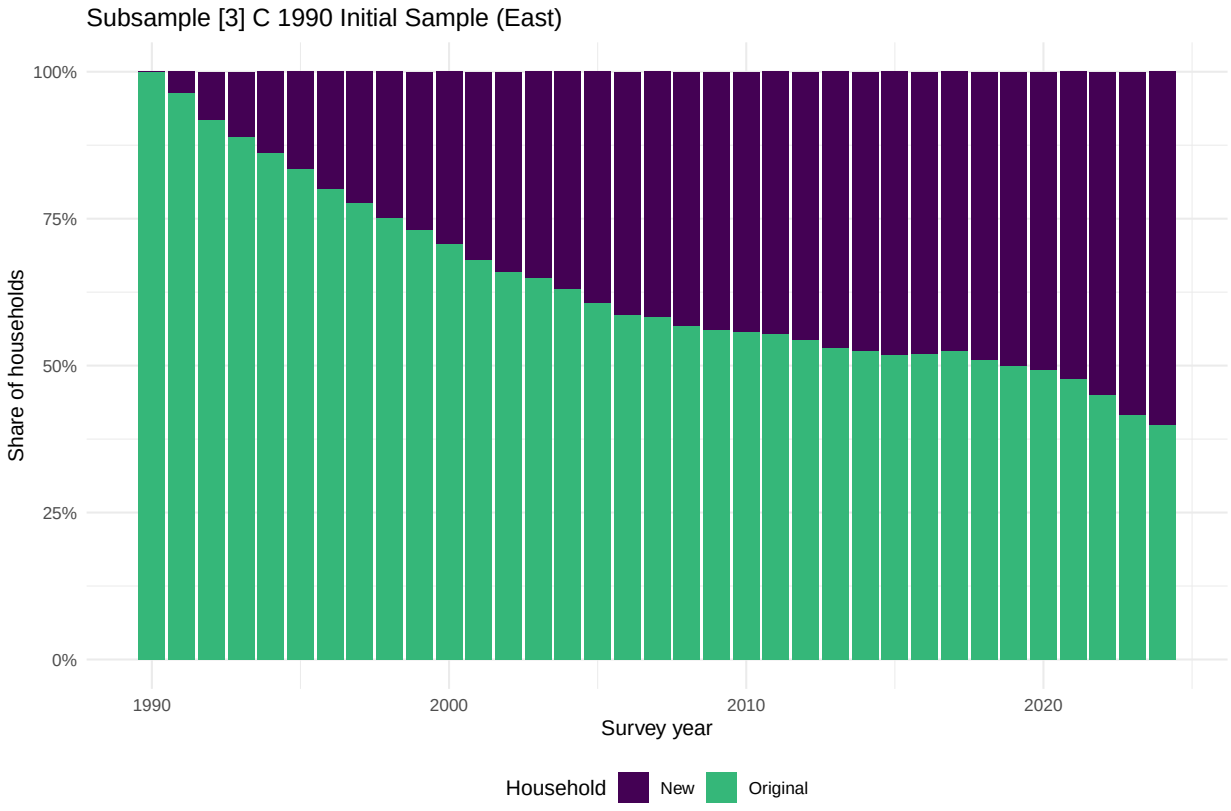

Figure 2.69.: Proportion of First-Wave and New Households in Sample C.

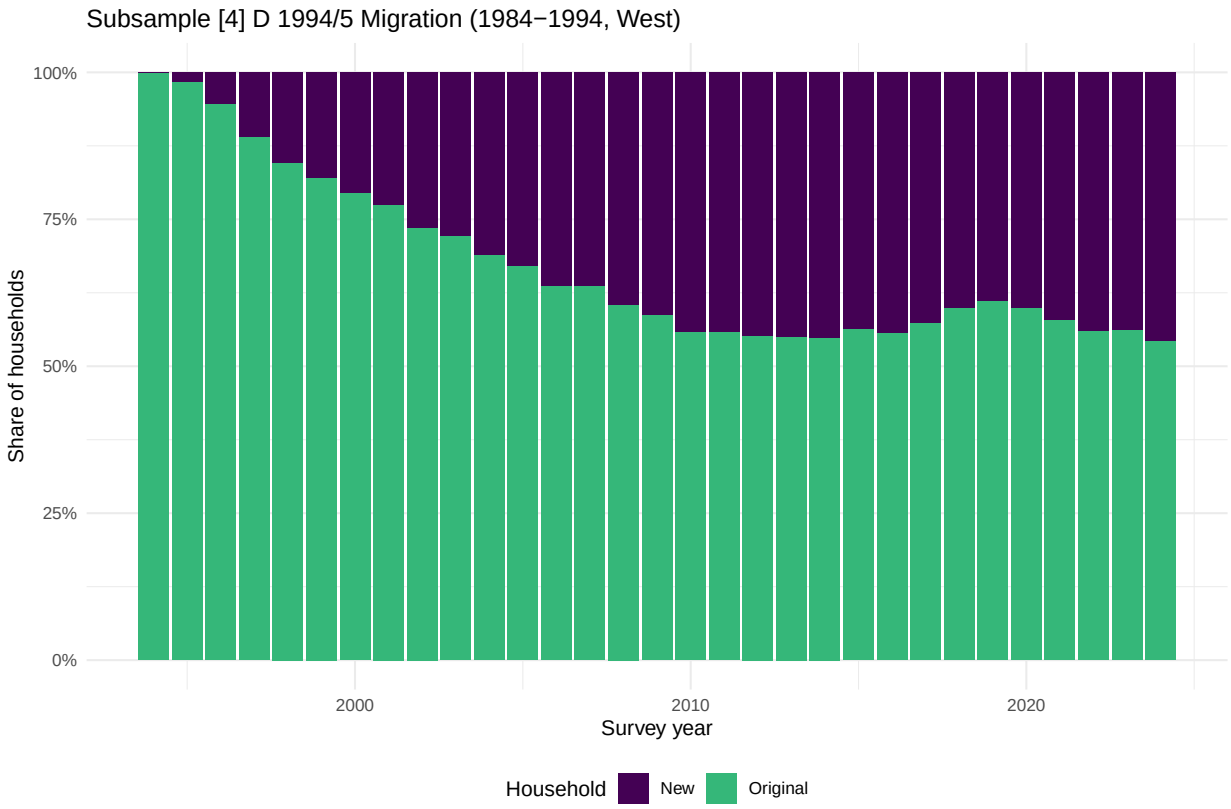

Figure 2.70.: Proportion of First-Wave and New Households in Sample D.

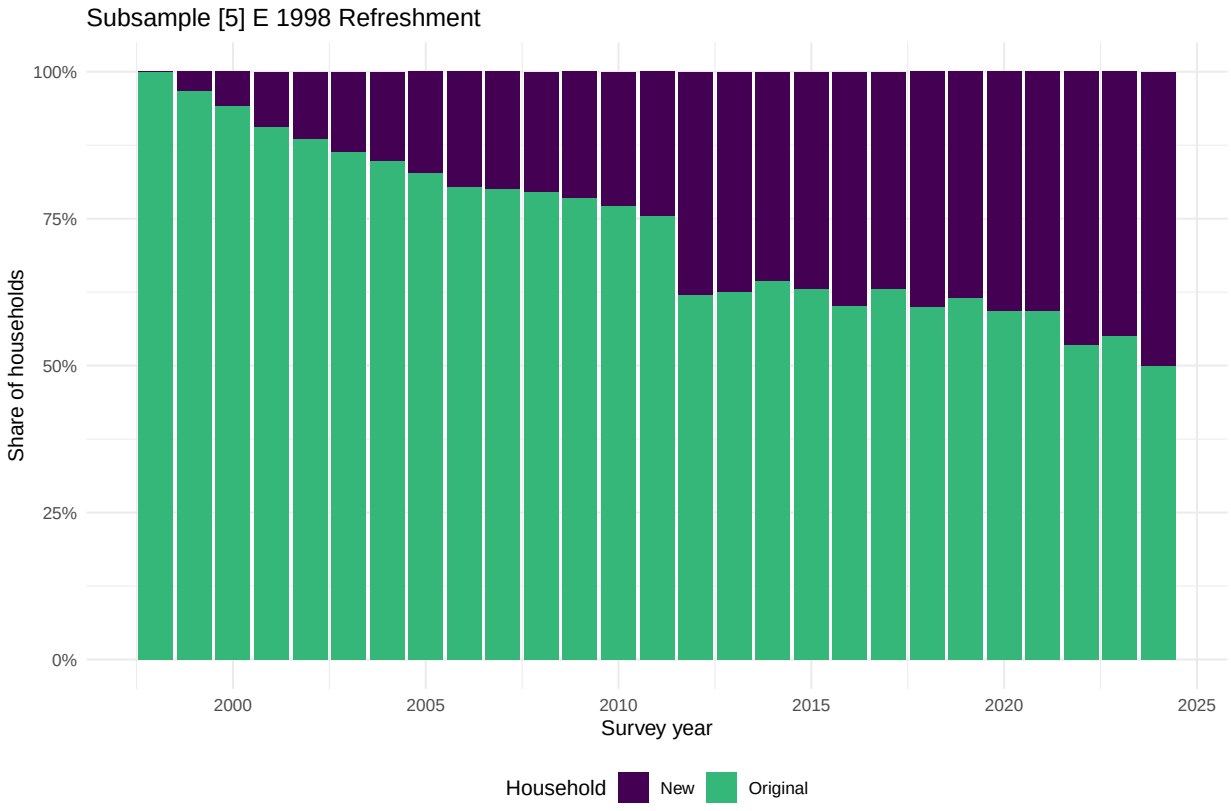

Figure 2.71.: Proportion of First-Wave and New Households in Sample E.

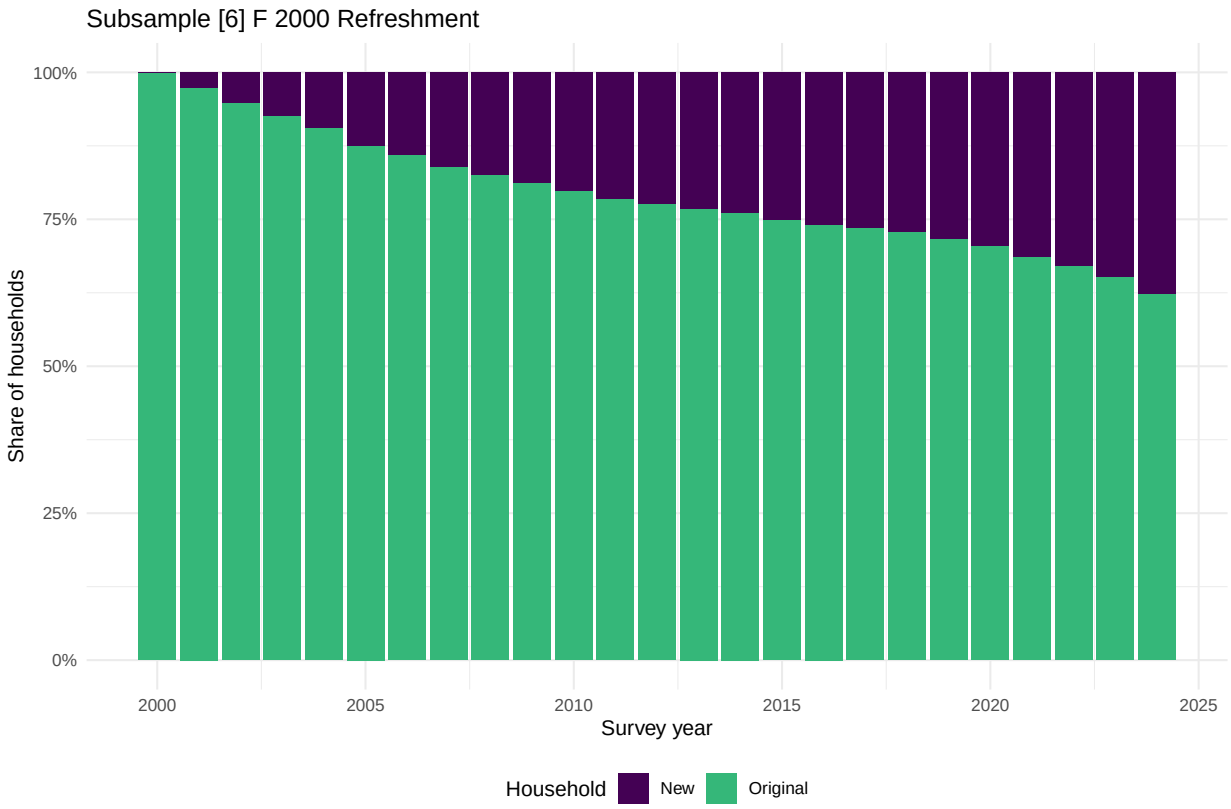

Figure 2.72.: Proportion of First-Wave and New Households in Sample F.

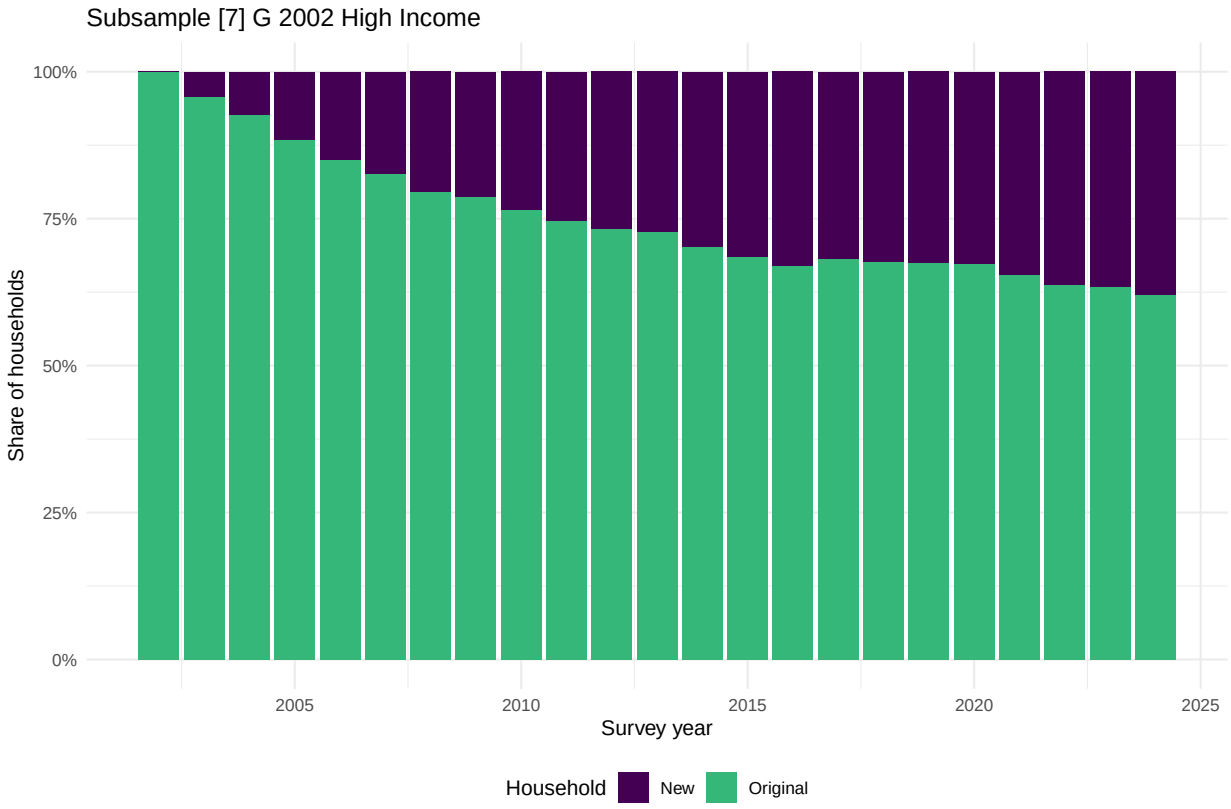

Figure 2.73.: Proportion of First-Wave and New Households in Sample G.

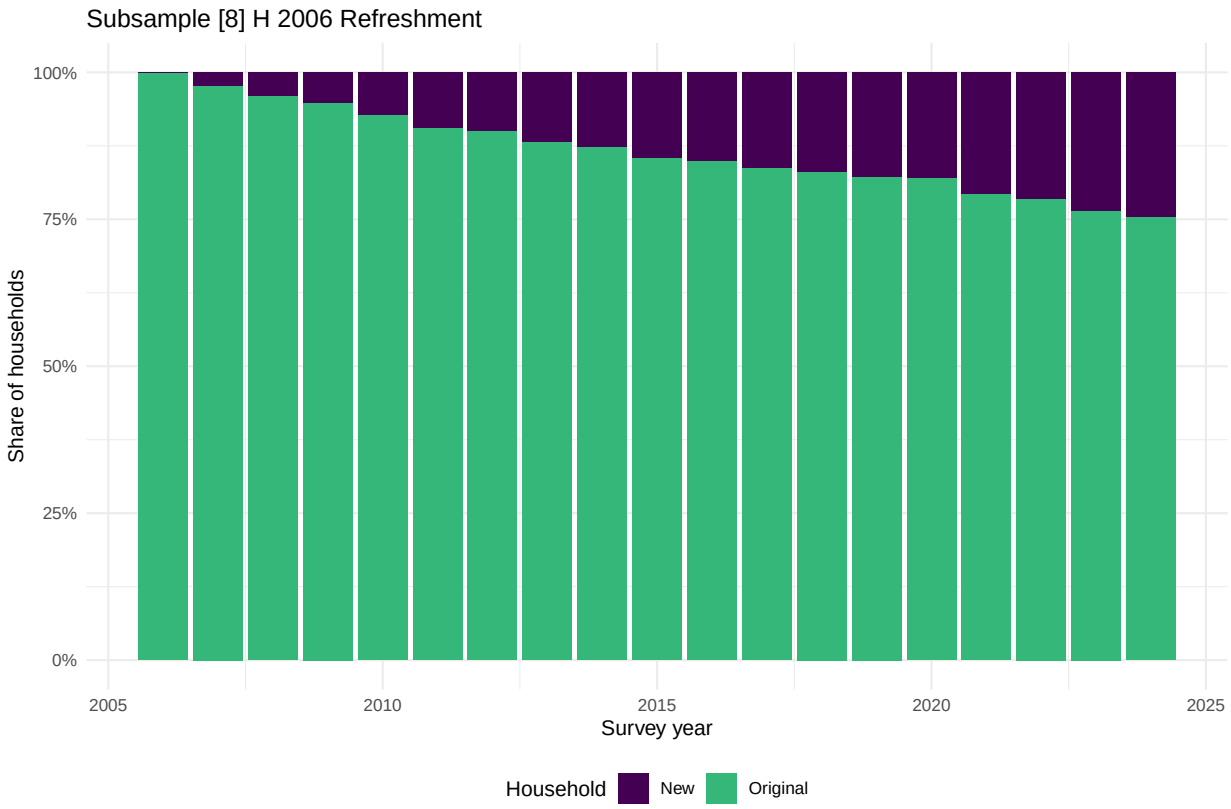

Figure 2.74.: Proportion of First-Wave and New Households in Sample H.

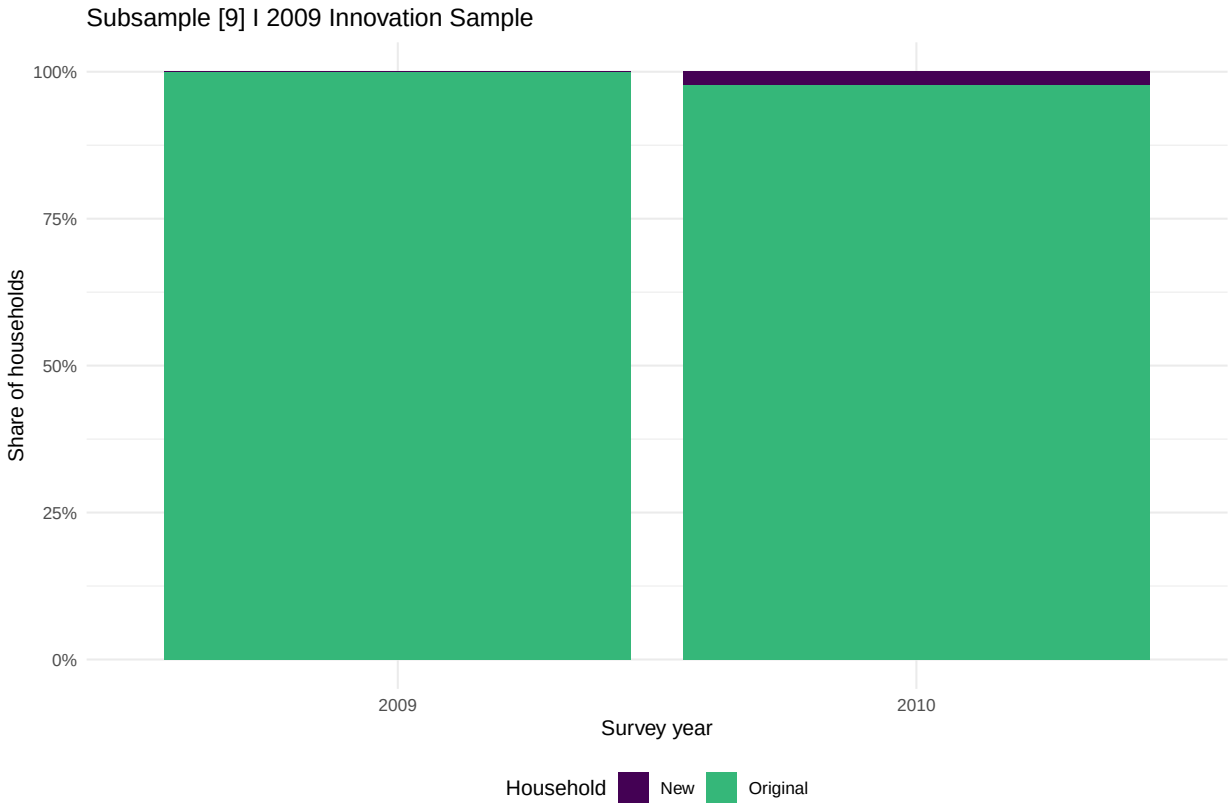

Figure 2.75.: Proportion of First-Wave and New Households in Sample I.

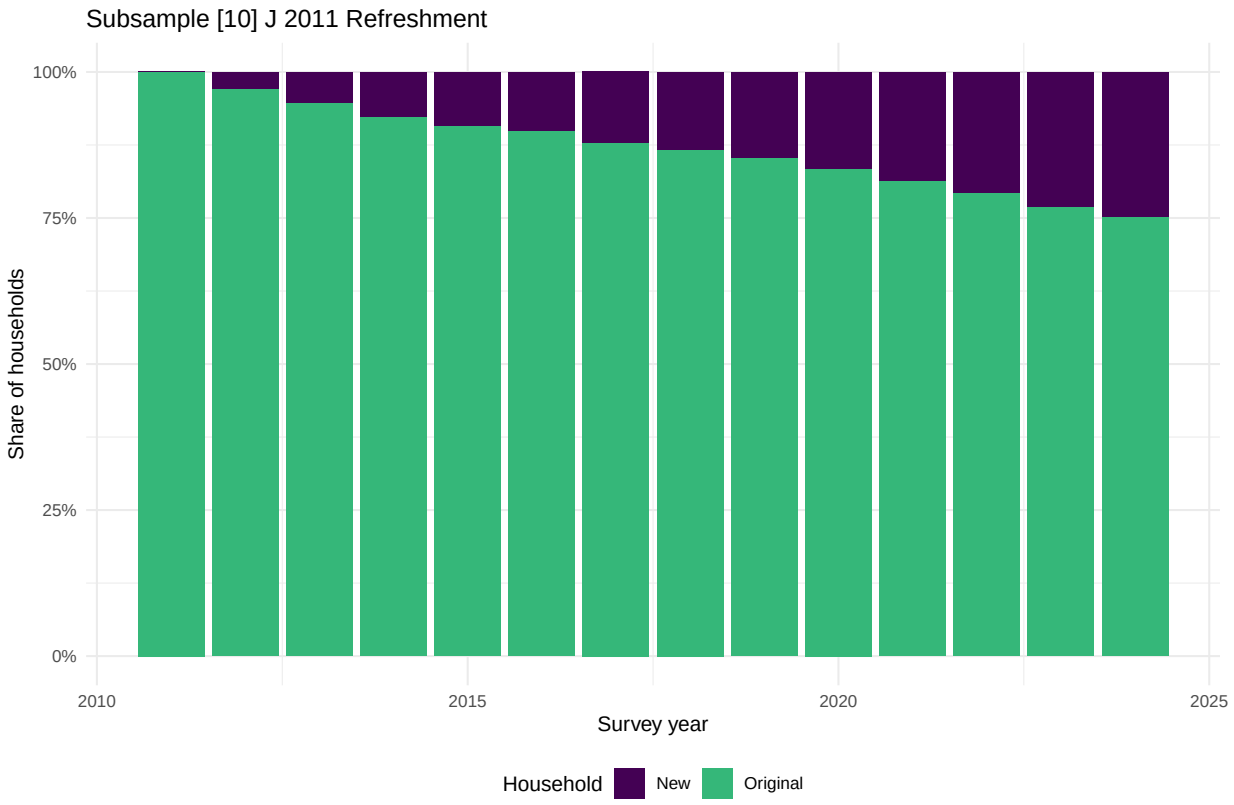

Figure 2.76.: Proportion of First-Wave and New Households in Sample J.

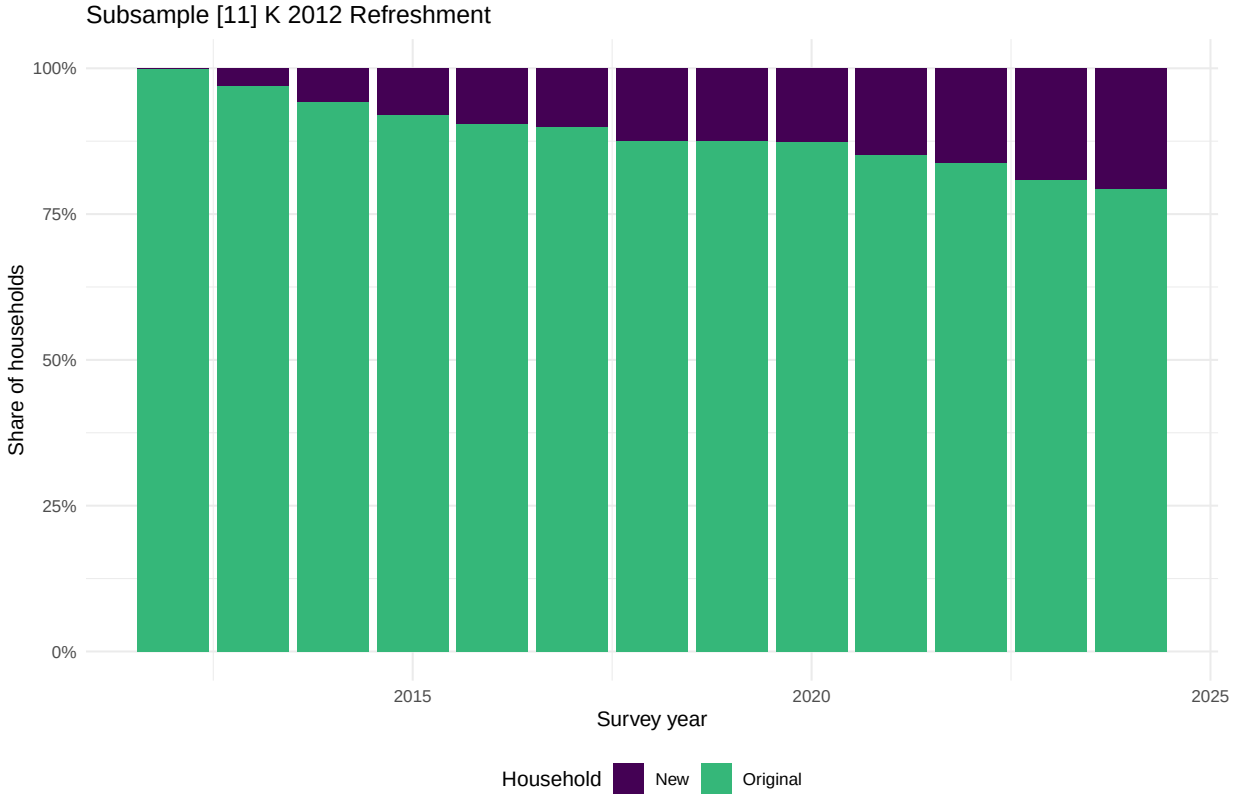

Figure 2.77.: Proportion of First-Wave and New Households in Sample K.

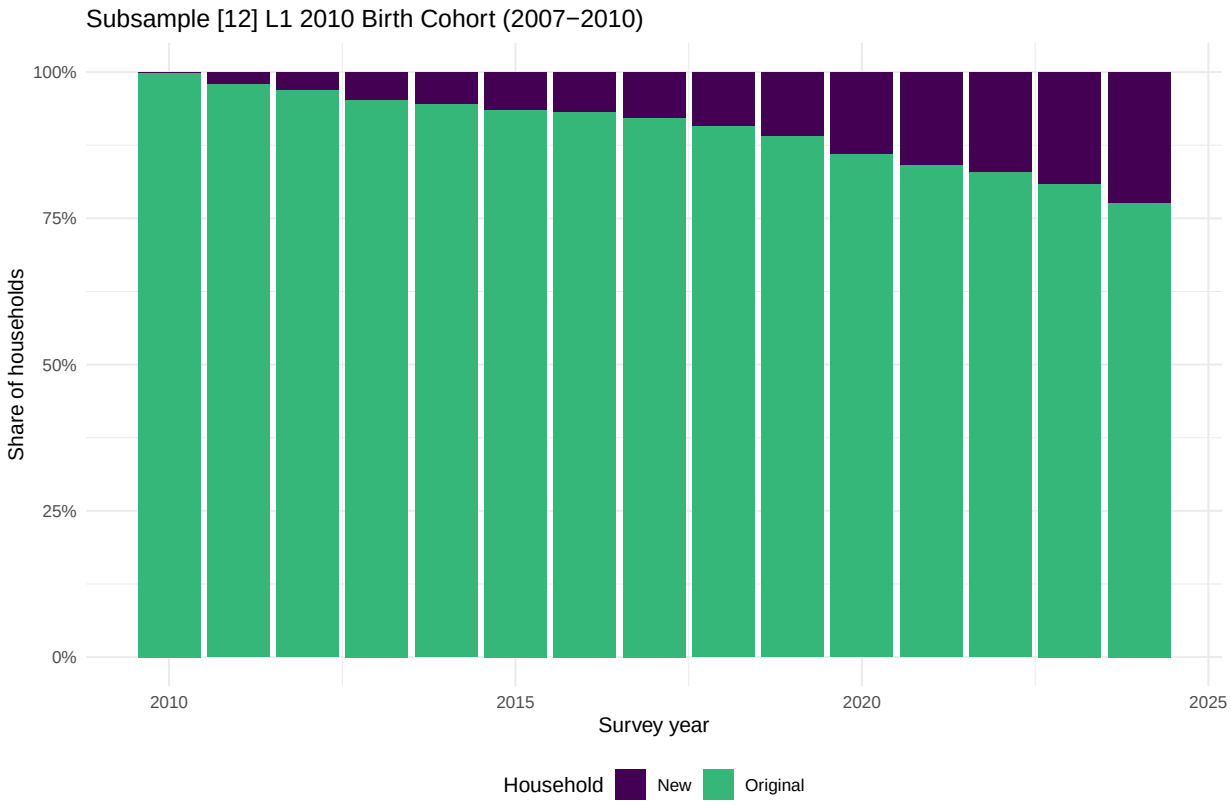

Figure 2.78.: Proportion of First-Wave and New Households in Sample L1.

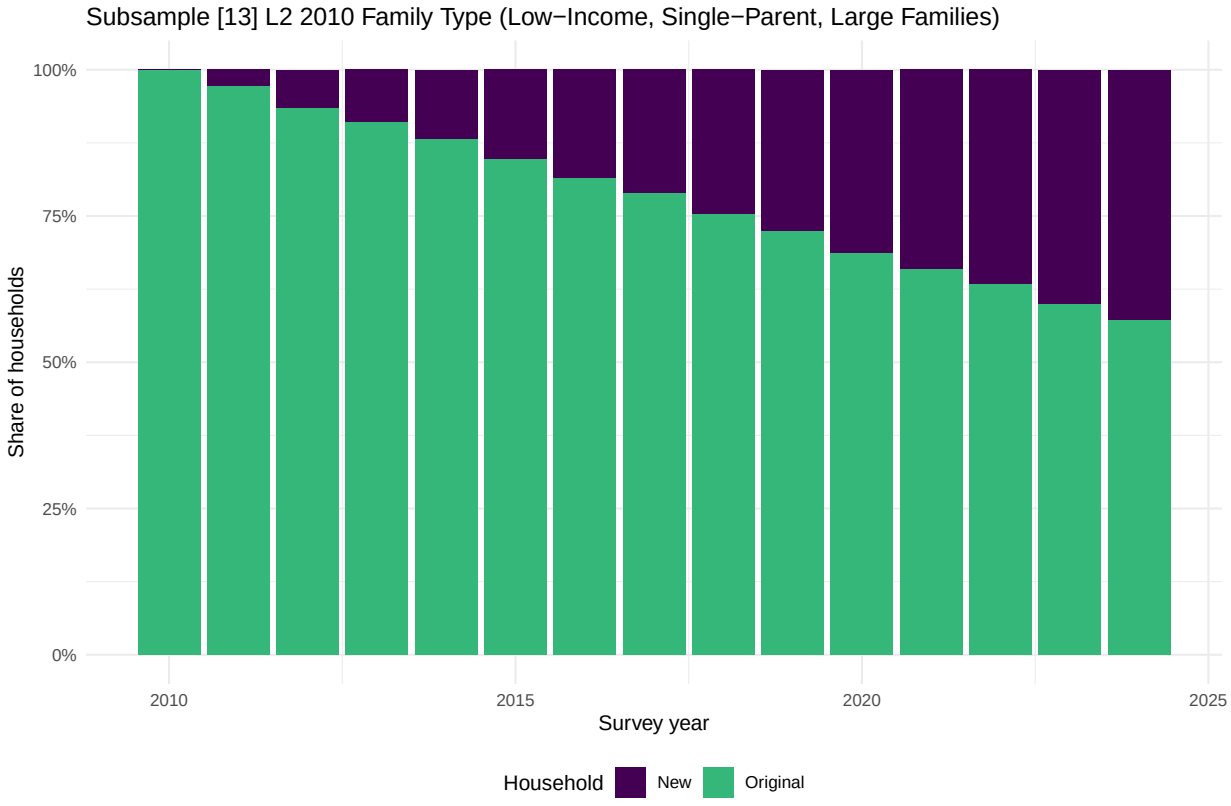

Figure 2.79.: Proportion of First-Wave and New Households in Sample L2.

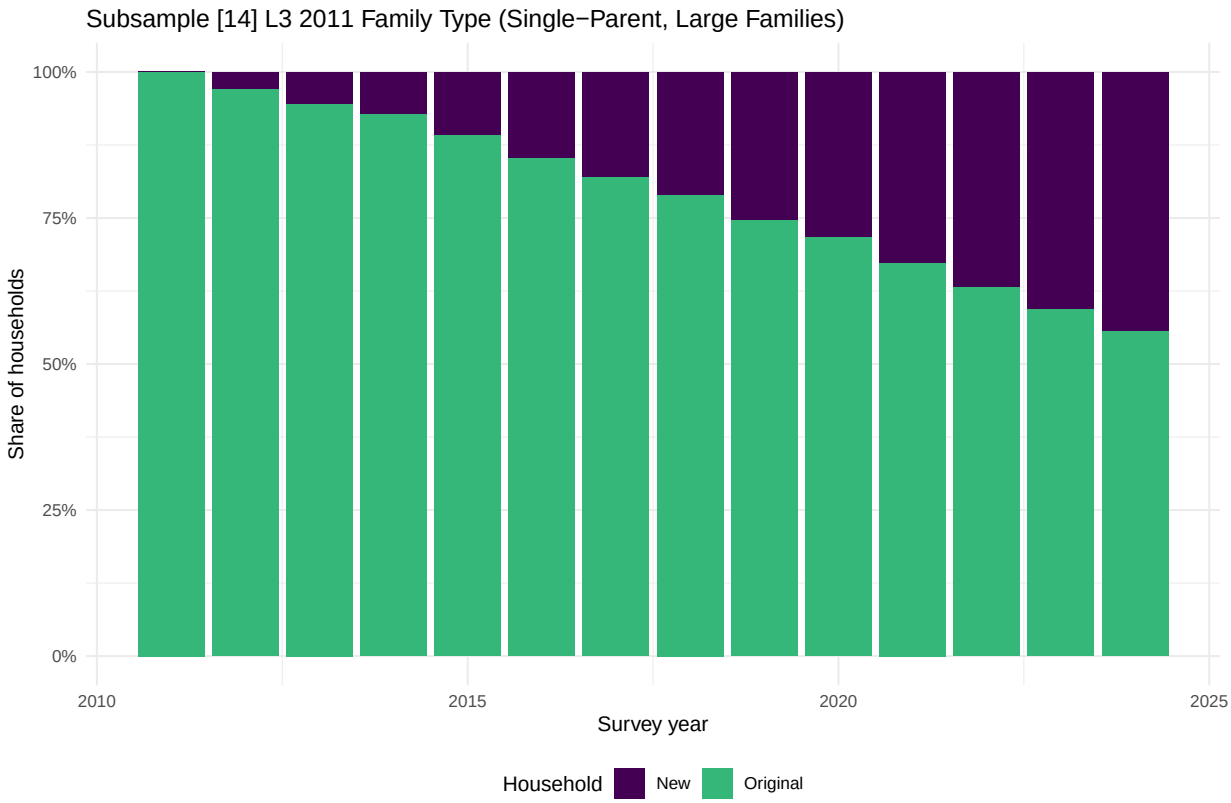

Figure 2.80.: Proportion of First-Wave and New Households in Sample L3.

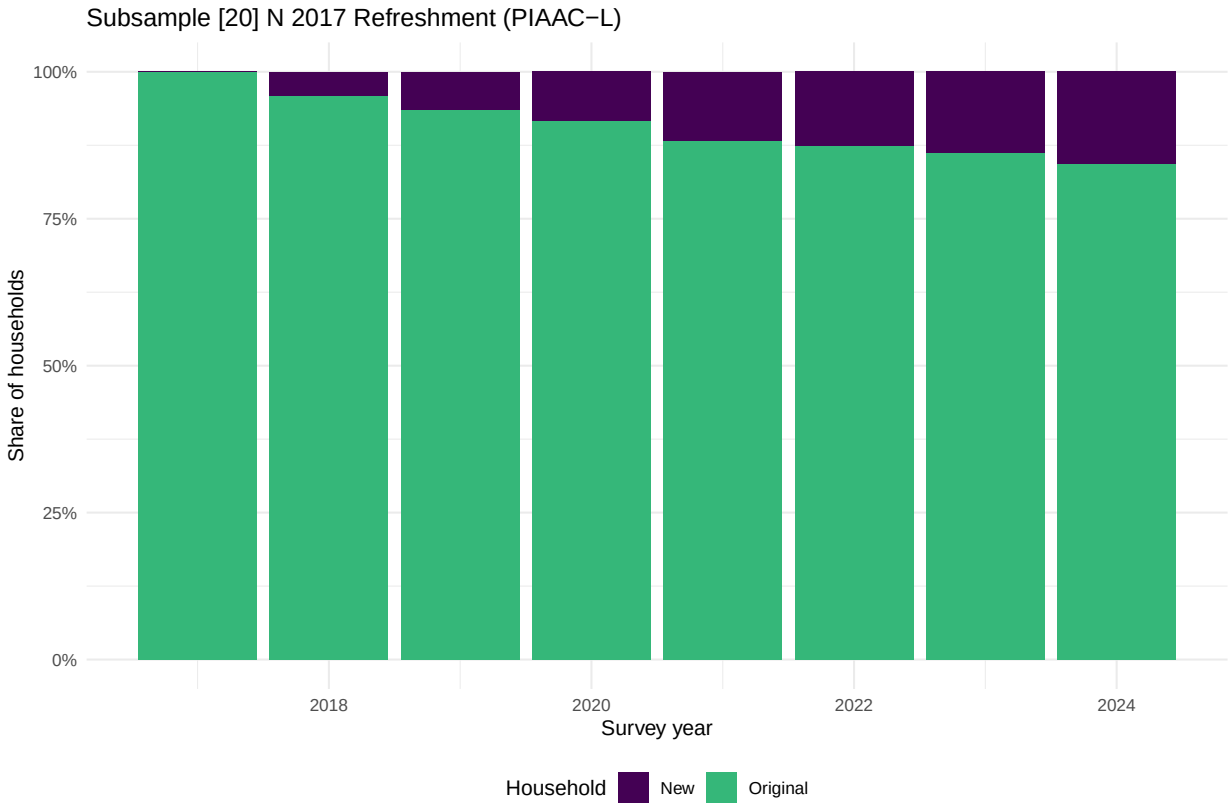

Figure 2.81.: Proportion of First-Wave and New Households in Sample N.

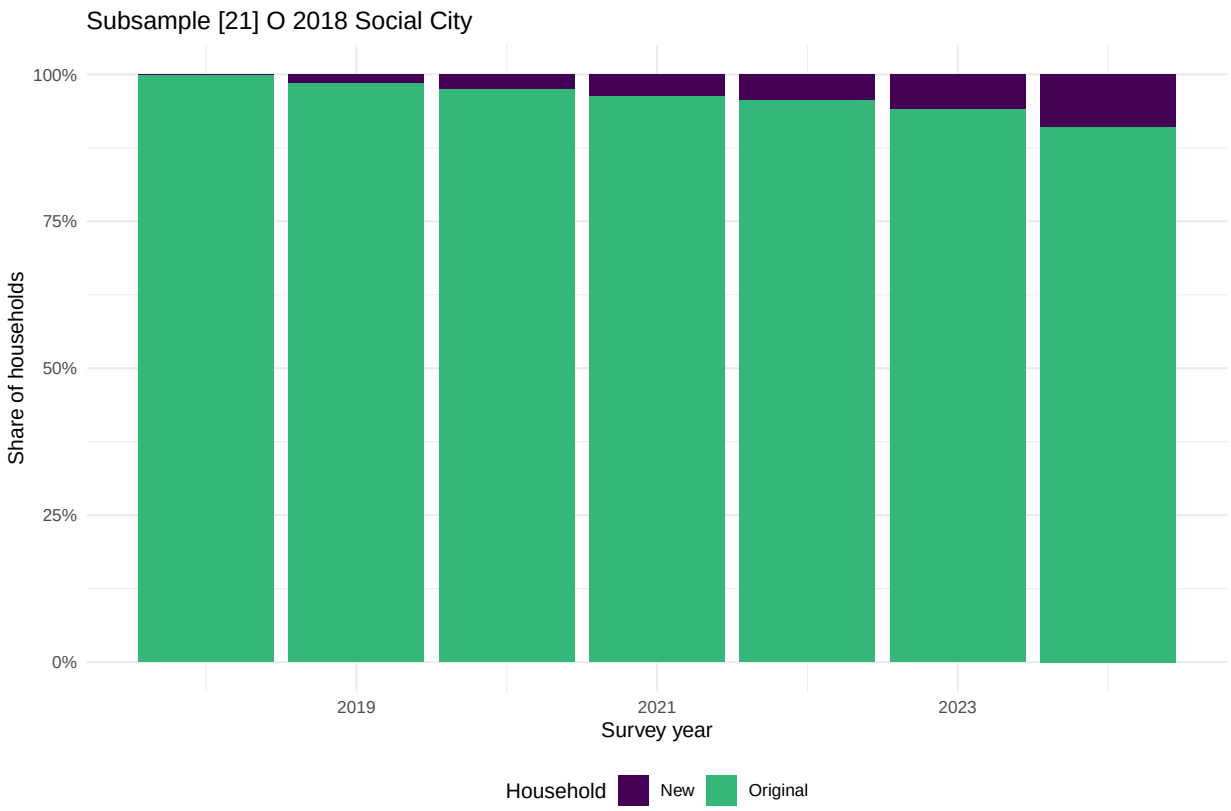

Figure 2.82.: Proportion of First-Wave and New Households in Sample O.

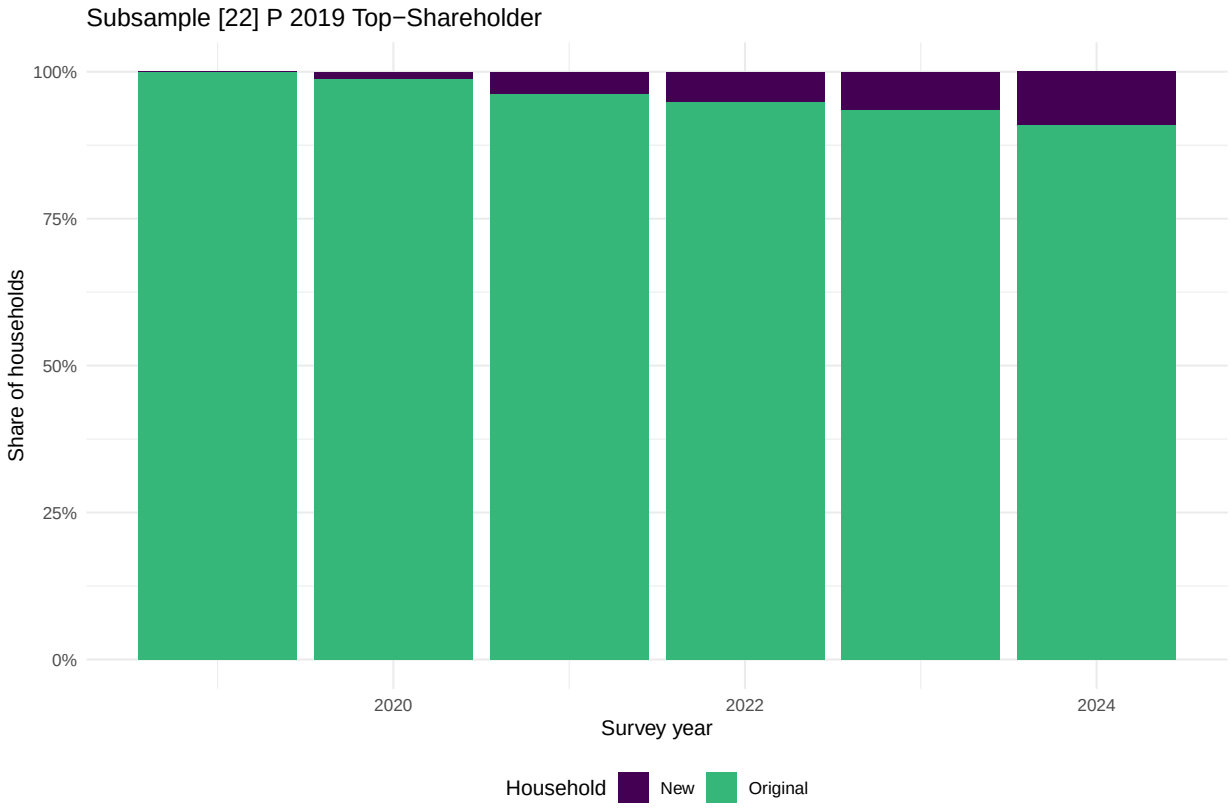

Figure 2.83.: Proportion of First-Wave and New Households in Sample P.

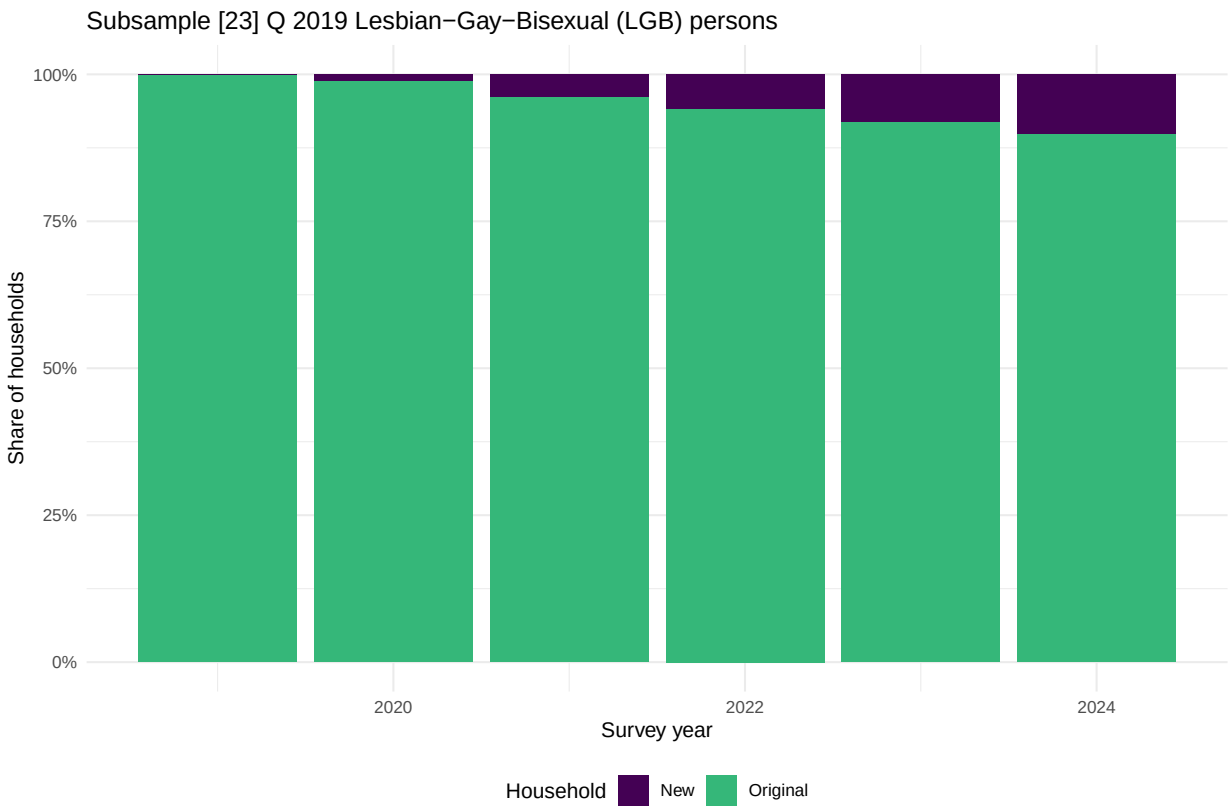

Figure 2.84.: Proportion of First-Wave and New Households in Sample Q.

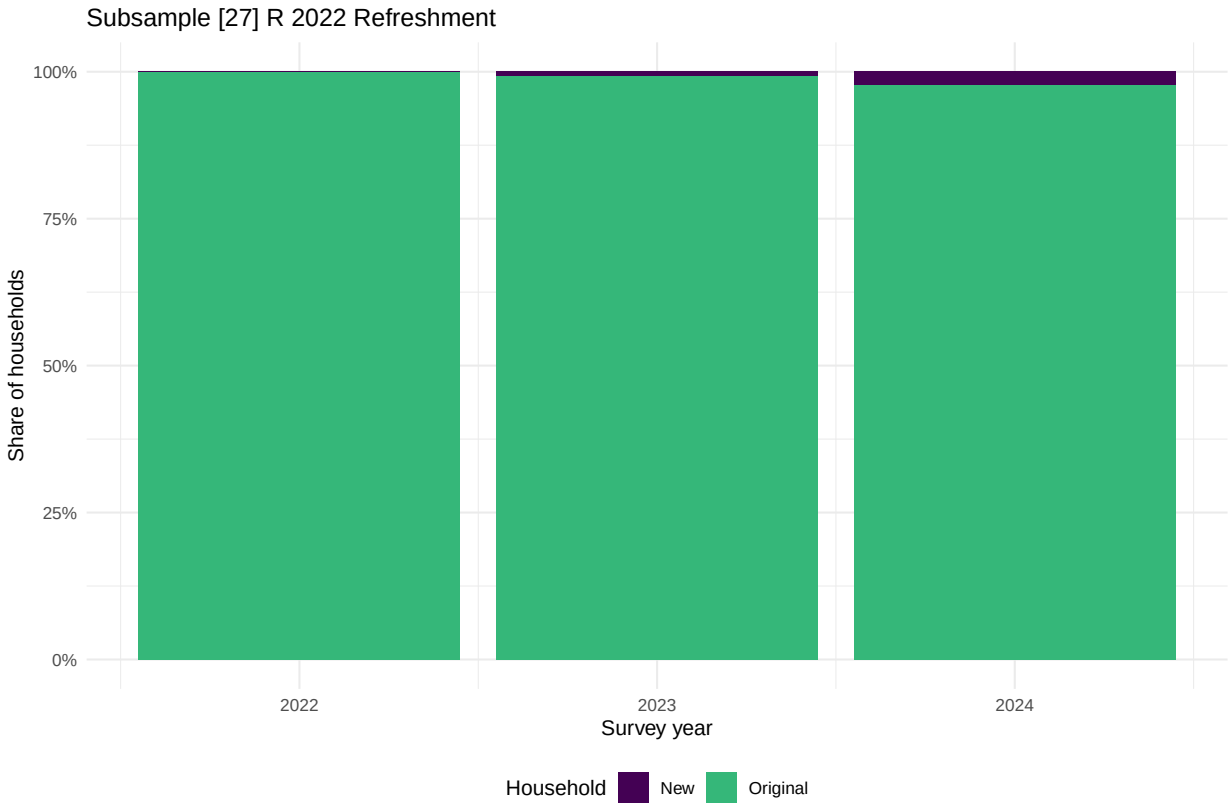

Figure 2.85.: Proportion of First-Wave and New Households in Sample R.

2.5.2. IAB-SOEP Migration Sample

The following figures, starting with Figure 2.86, display the development of the share of original households for each sample of the IAB-SOEP Migration Sample.

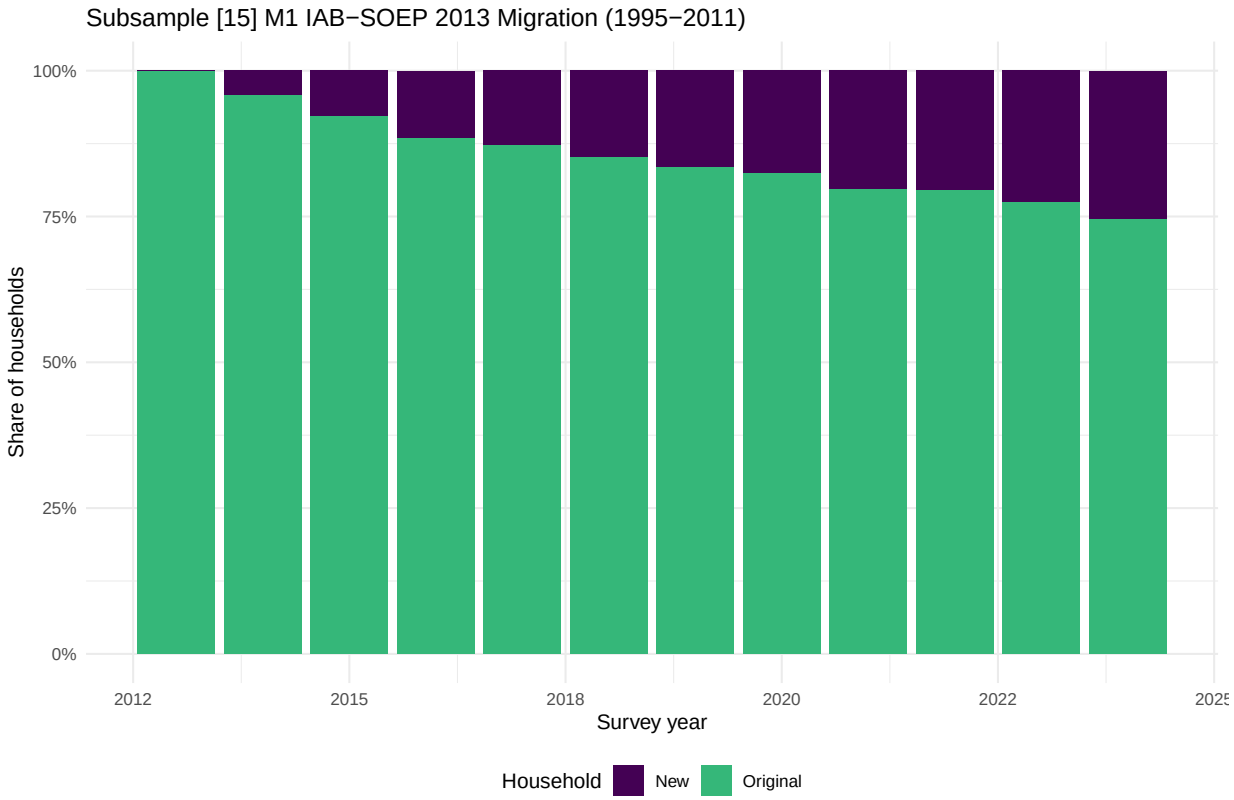

Figure 2.86.: Proportion of First-Wave and New Households in Sample M1.

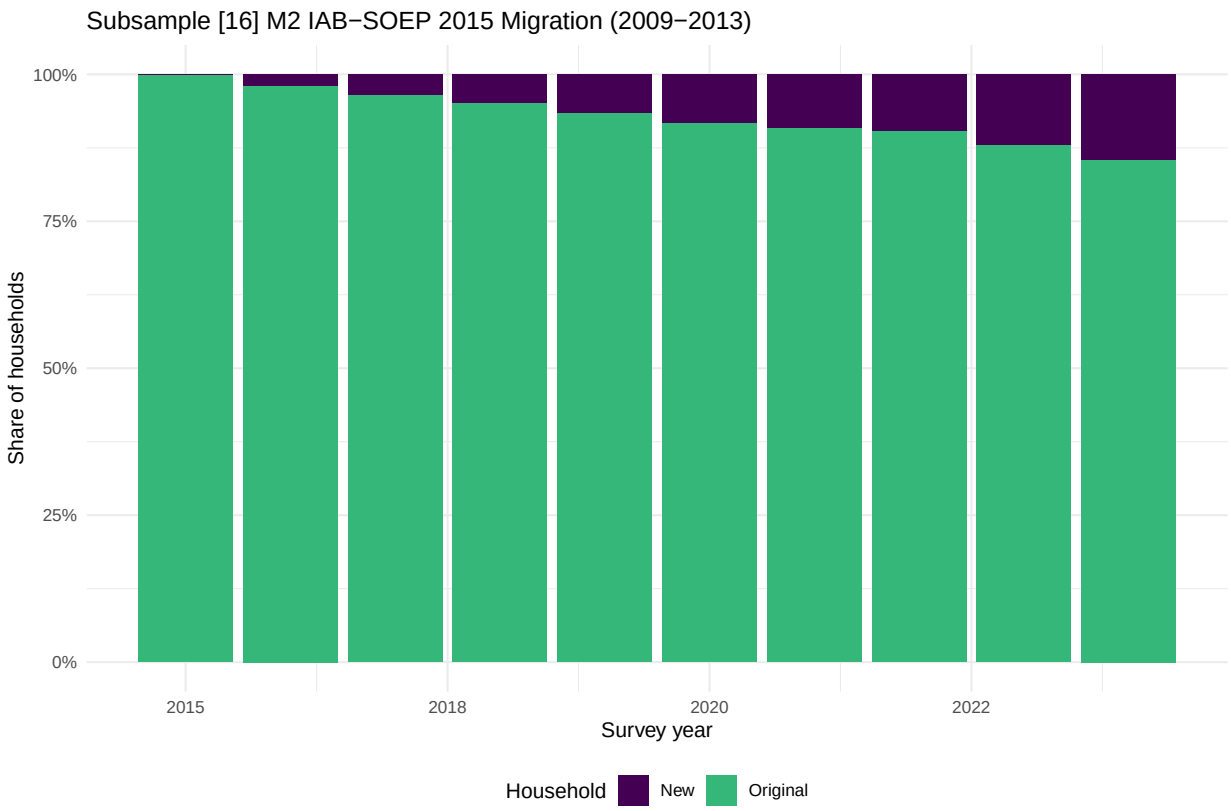

Figure 2.87.: Proportion of First-Wave and New Households in Sample M2.

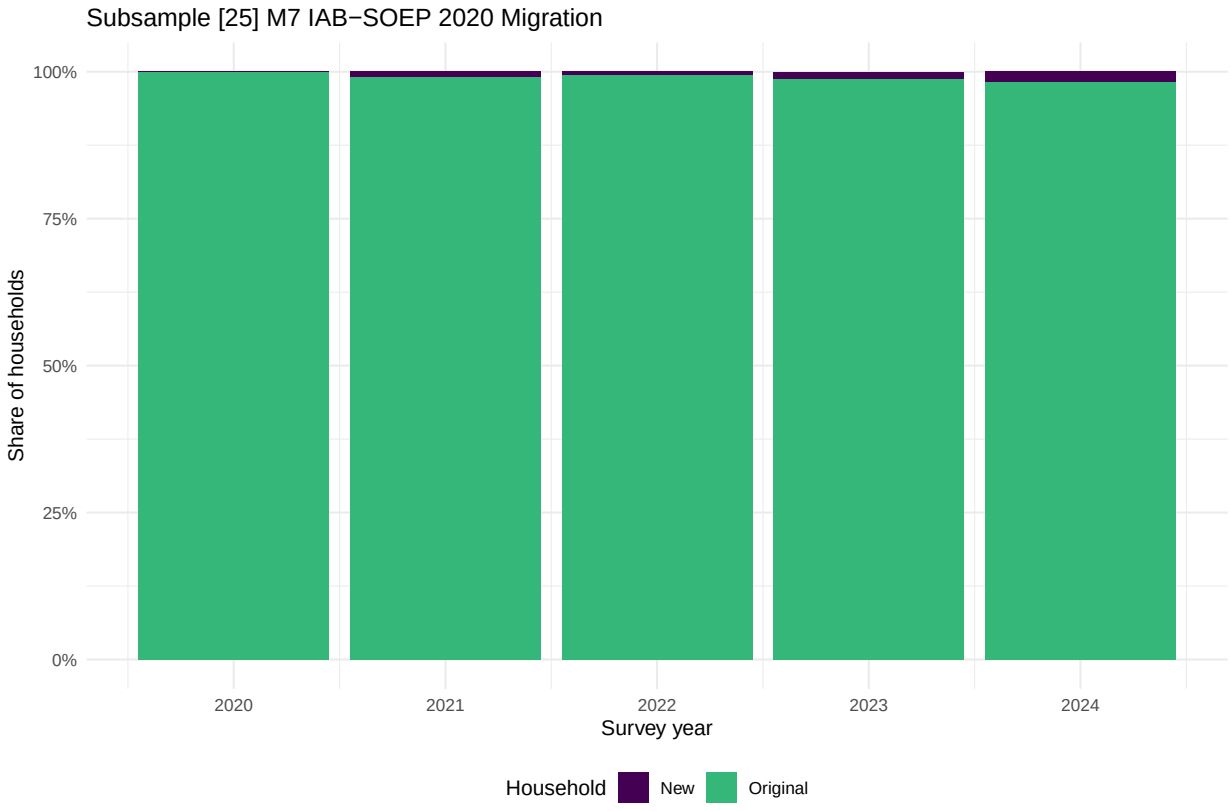

Figure 2.88.: Proportion of First-Wave and New Households in Sample M7.

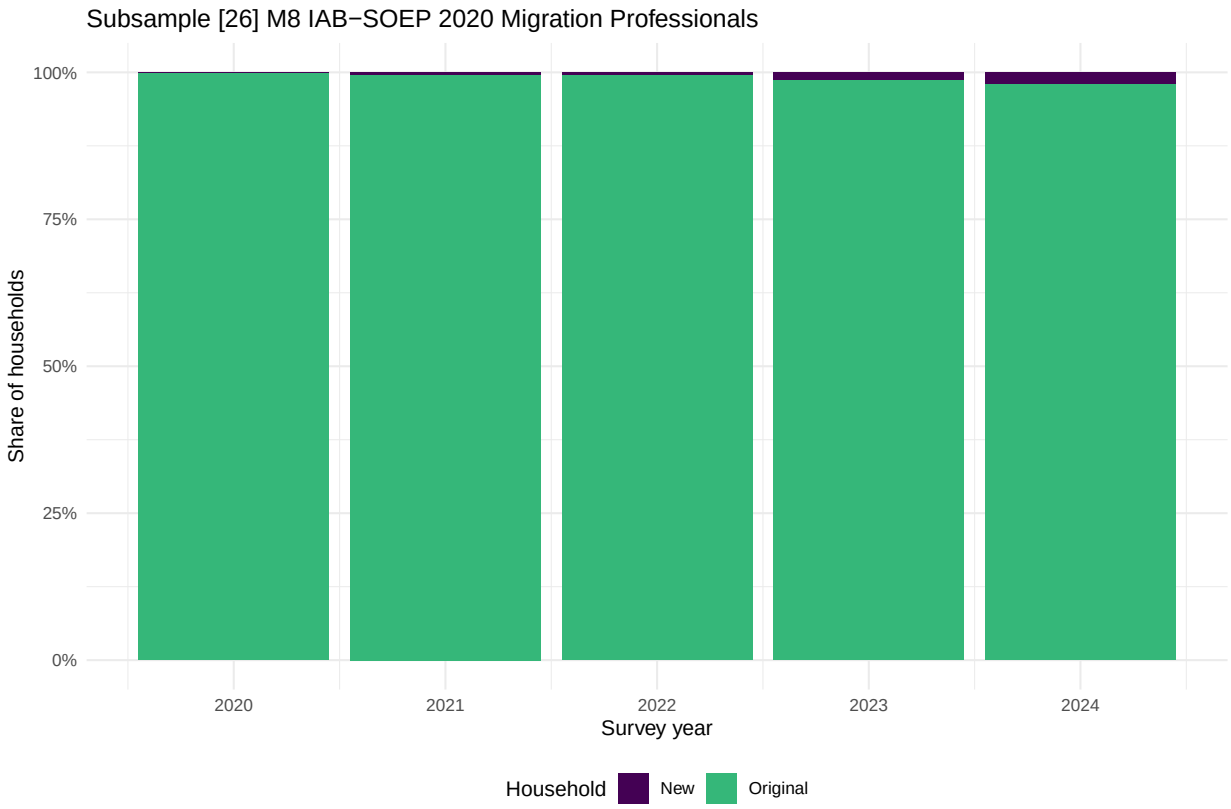

Figure 2.89.: Proportion of First-Wave and New Households in Sample M8.

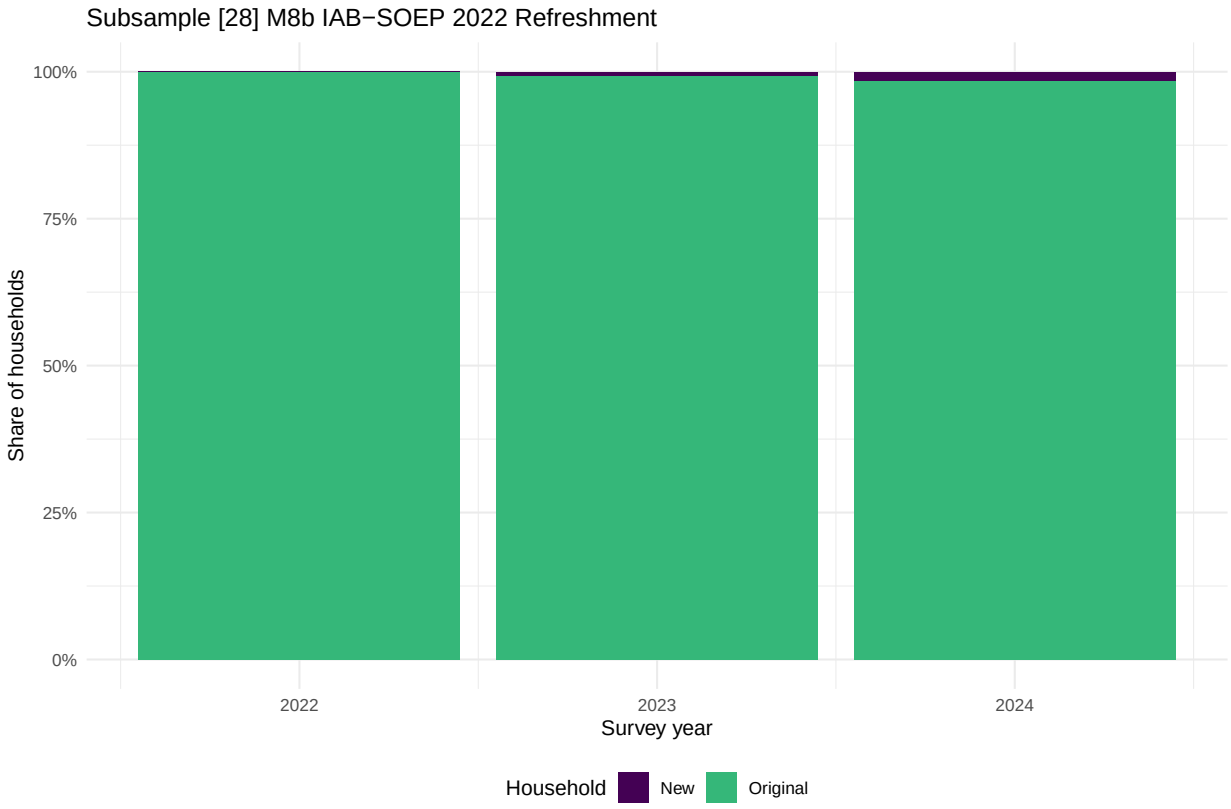

Figure 2.90.: Proportion of First-Wave and New Households in Sample M8b.

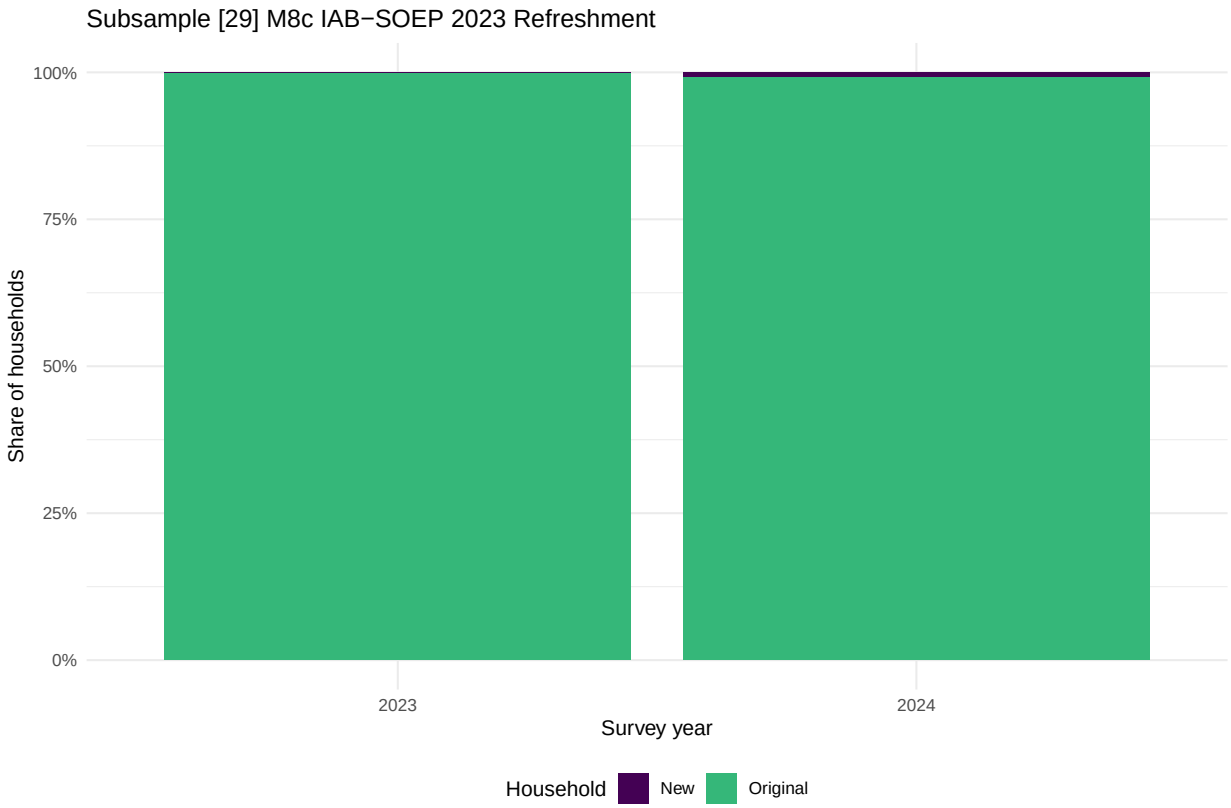

Figure 2.91.: Proportion of First-Wave and New Households in Sample M8c.

2.5.3. IAB-BAMF-SOEP Survey of Refugees

The following figures, starting with Figure 2.92, display the development of the share of original households for each sample of the IAB-BAMF-SOEP Survey of Refugees.

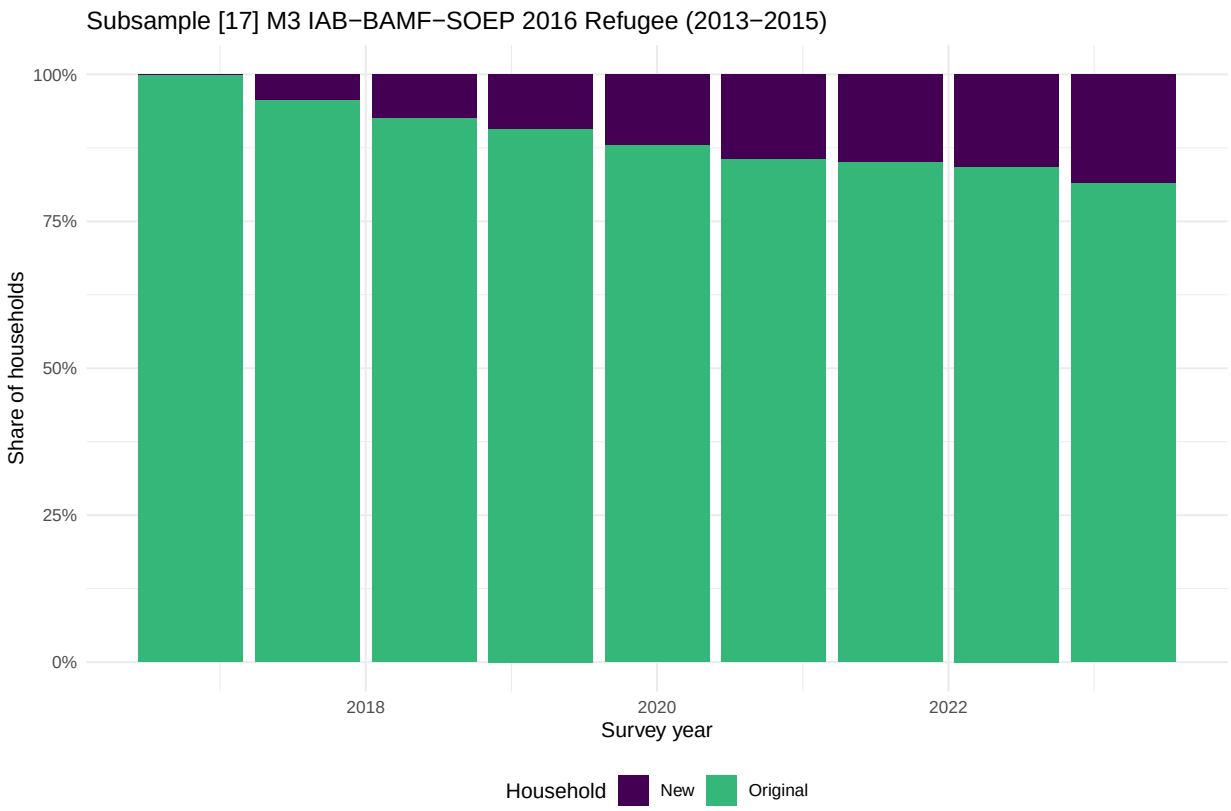

Figure 2.92.: Proportion of First-Wave and New Households in Sample M3.

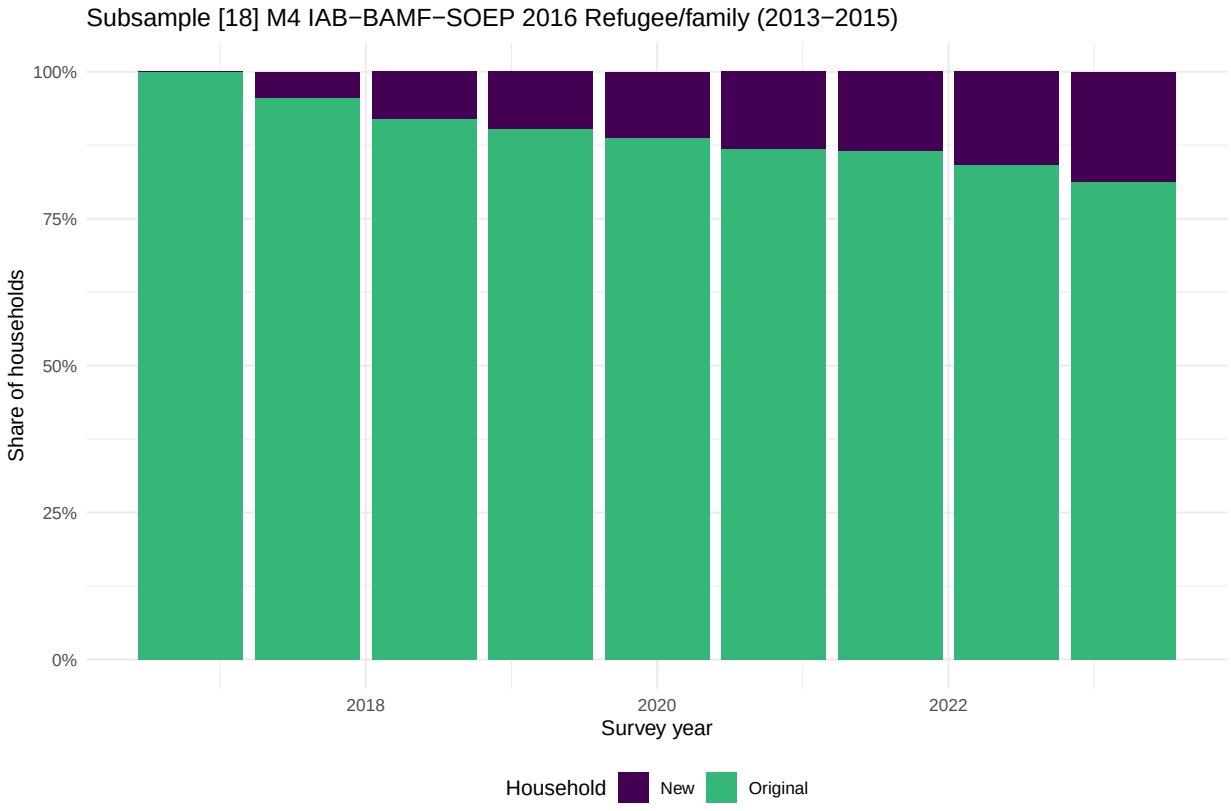

Figure 2.93.: Proportion of First-Wave and New Households in Sample M4.

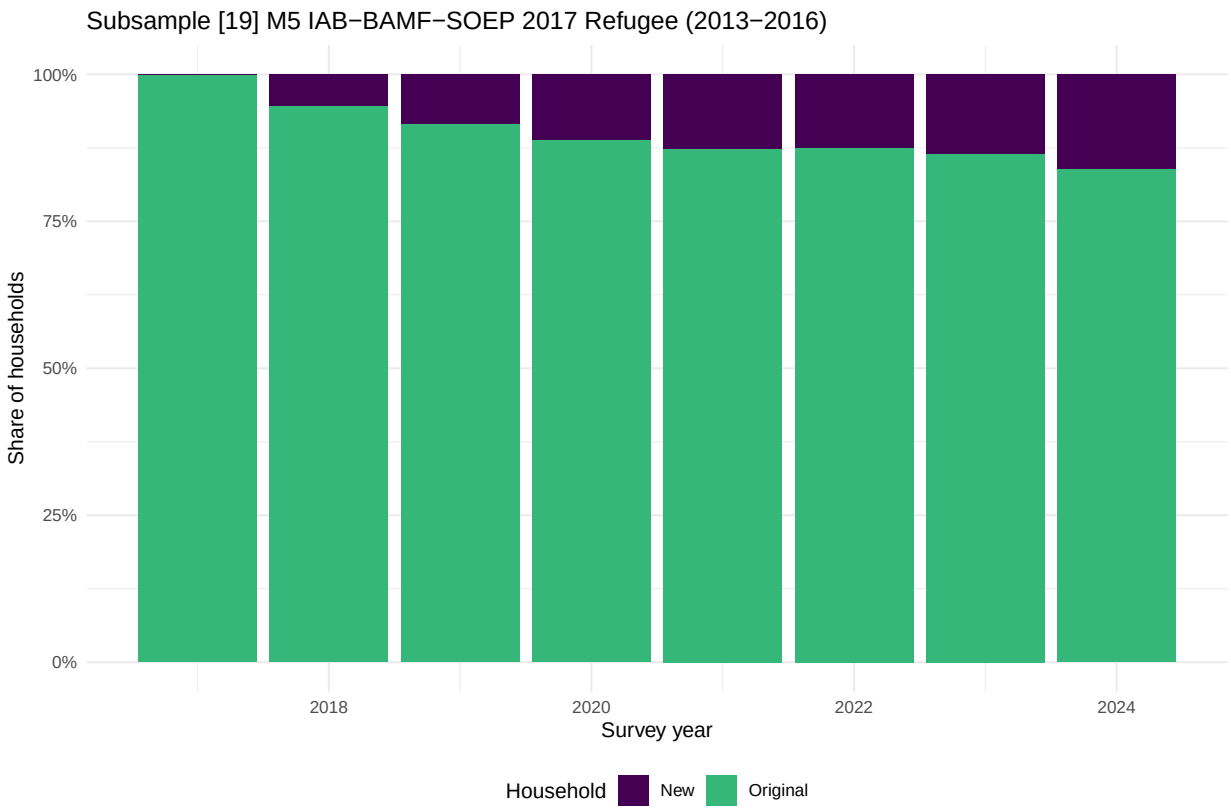

Figure 2.94.: Proportion of First-Wave and New Households in Sample M5.

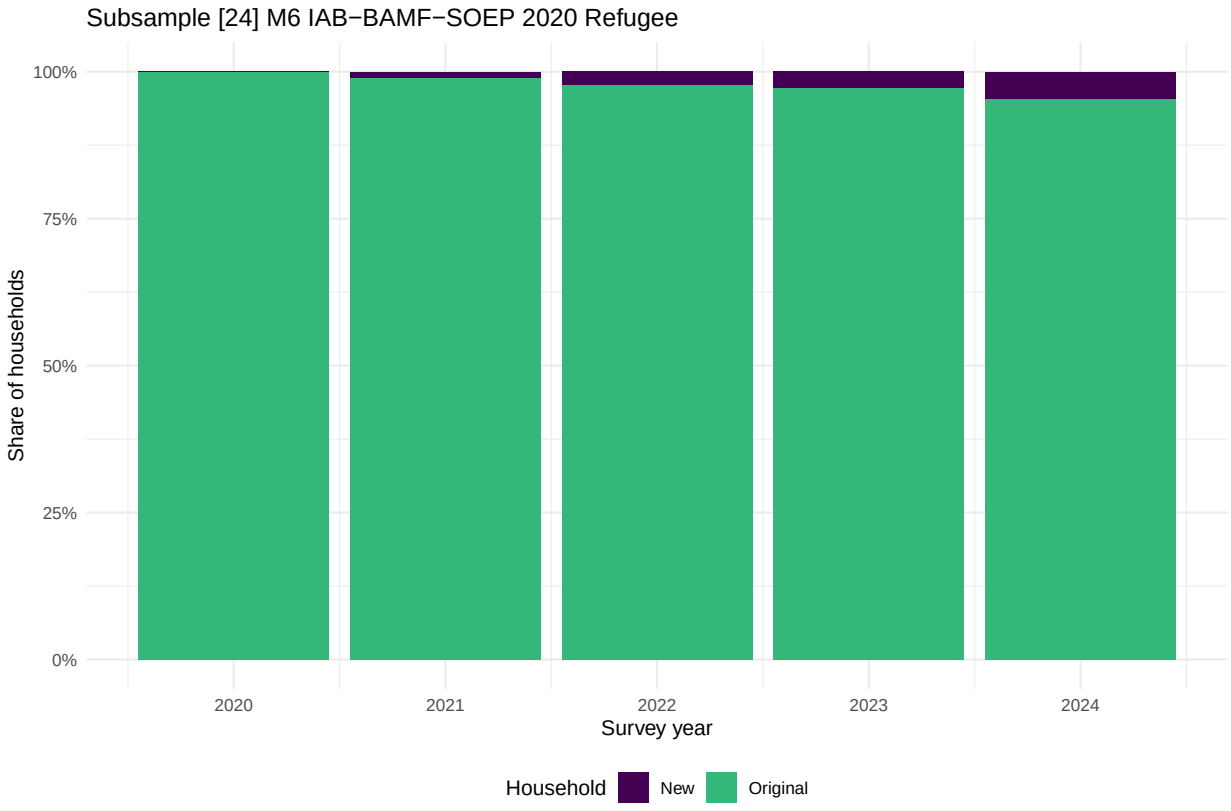

Figure 2.95.: Proportion of First-Wave and New Households in Sample M6.

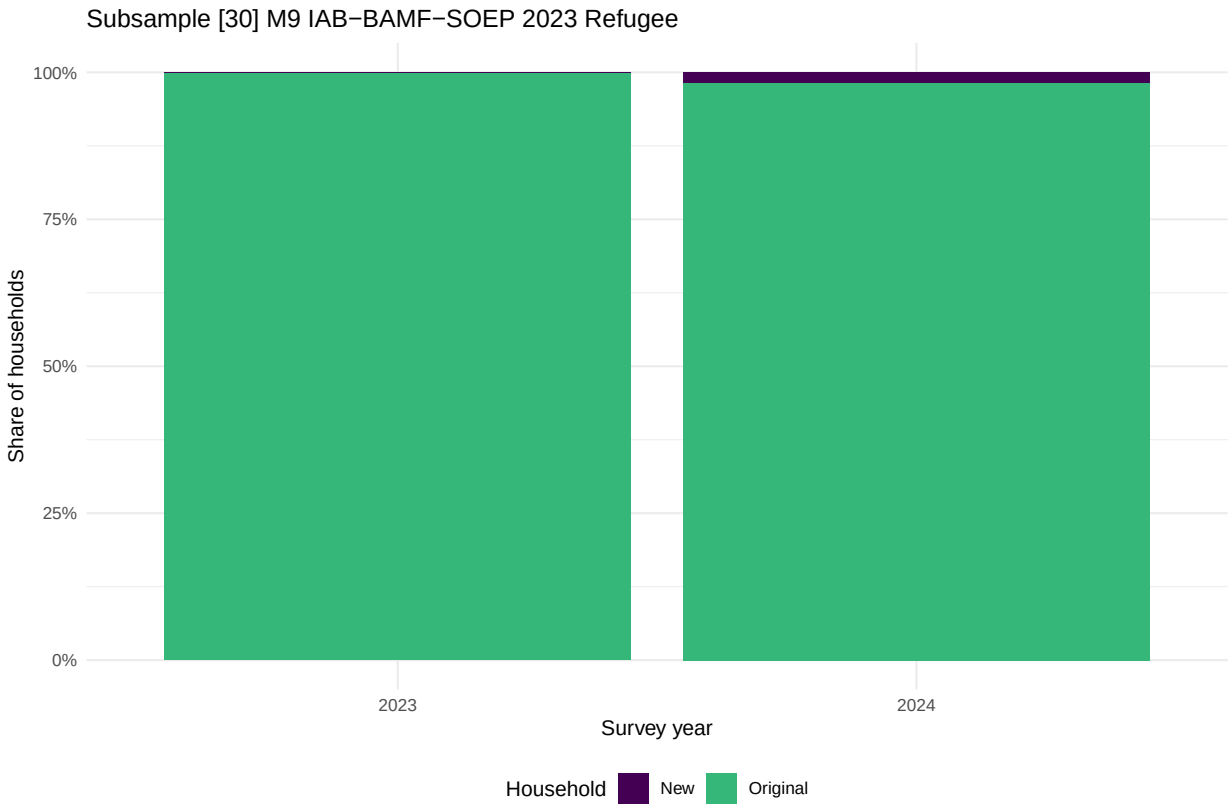

Figure 2.96.: Proportion of First-Wave and New Households in Sample M9.

3. Panel Attrition Due to Unsuccessful Follow-Ups

We predict the probability of re-contacting a household relative to unsuccessful follow-up in the previous year as well as their participation decision in the actual year. The product of the inverse of these estimated probabilities is used to derive the adjustment factor `hbleib` provided in `HPATHL`. It serves as the basis for adjusting weights in the actual year and allows users to compute longitudinal weights, too. In the estimation process itself, we make use of the longitudinal data on household and individual level measured in the years before. For the prediction of successful re-contact, we benefit from rich information on the field work processes. We also incorporate information on interviewers for in-person interviews compared to self-administered modes. All fieldwork information used is based on the first contact with the household, as all subsequent contacts are endogenous. Besides that, we use regional information at different levels (building, building blocks, streets, zip code, municipality, and district) provided by microm (Goebel et al. (2014)), infas360 (https://www.infas360.de), and INKAR (Bundesinstitut für Bau- Stadt- und Raumforschung (BBSR) (2025)). We group the subsamples of the SOEP to gain statistical power, especially relevant for older subsamples. The grouping follows our understanding of which samples are similar, based on the population they represent, their time as part of the SOEP, and what users typically use for their analysis. New samples in their second wave are modeled separately as their response mechanism differs from older samples. We also strictly separate between SOEP-Core, the IAB-SOEP Migration Sample and the IAB-BAMF-SOEP Survey of Refugees.

We estimate a logistic regression model using the `glinternet` algorithm implemented in Lim and Hastie (2021). This approach performs L1-penalized maximum likelihood estimation with hierarchical interaction constraints. It allows for selecting main effects and interactions simultaneously from a large set of candidate predictors while avoiding overfitting. The penalty parameter is selected using K-fold cross-validation. Specifically, we use the *minimum-error* rule for prediction, because we want to predict in-sample. These models cannot be used for inference. Instead this report provides logistic regression models that are derived from these penalized models.

We use a two-stage approach combining penalized regression from the prediction task and classical logistic regression to identify interpretable models for nonresponse adjustment and survey weighting.

First, we take the `glinternet` algorithm and extract all predictors that are still non-zero under the *one-standard-error* rule. This way, we select the most parsimonious model whose predictive performance is statistically indistinguishable from the best performing model.

We refit an unpenalized logistic regression model using the variables selected by penalized regression, because the penalized model identifies candidate predictors but does not directly produce interpretable maximum likelihood estimates. Due to the different geometry of penalized regression, events-per-parameter are lower than what a logistic regression model can handle. We define events-per-parameter as the ratio between the number of observations in the smaller outcome class and the number of estimated model parameters. To ensure statistical reliability of the resulting model, we apply three additional reduction criteria.

Initially, interaction terms that occur in sparsely populated subgroups are removed. This prevents quasi-separation and inefficient estimates caused by an insufficient number of observations. Then, we iteratively remove the least informative predictors, prioritizing interaction terms, until the ratio of observations in the smaller outcome category to the number of estimated parameters exceeds a predefined threshold (events-per-parameter ≥ 10). This ensures that model parameters are supported by sufficient information in the data. Because most households can be found and contacted, and we observe few non-events, this is especially relevant for the models of contactability. Finally, we ensure

that interaction terms are only retained when the corresponding main effects remain in the model, preserving interpretability and statistical hierarchy.

The final model is an unpenalized logistic regression model with maximum likelihood estimates. It retains only predictors and interactions that are supported by sufficient sample information, efficient, and substantively interpretable. This approach combines the variable selection strengths of penalized regression with the interpretability and inferential validity of classical logistic regression. It ensures that the models used for survey weighting are both data-driven and statistically reliable.

The upper bound of model complexity is the result of sample size and event frequency, but models can also be less complex if we do not find any relevant predictors. The level of coarsening when grouping SOEP subsamples together therefore directly impacts the number of predictors possible in each model. You might notice that when going back to older reports, where we modeled each subsample separately.

3.1. The Frequency of Successful Follow-Ups

Initially, the fieldwork organization identifies whether (a) a household still lives at the old address, (b) an entire household has moved, (c) all household members have left the population by moving abroad or dying, or (d) all household members have returned to an existing panel household. Tables 3.1, 3.2, 3.3, and 3.4 display the number of households (HH) of the previous waves that need to be re-contacted and the proportion (p) of successful follow-ups by samples and wave ranging from 1984 to 2024. The re-contact rates refer to all households of the previous wave that still remain in the population plus split-off households. A contact is regarded as successful if the interviewer documented either a completed interview or a refusal in the address protocol. Moreover, if former household members returned to an existing panel household, this was classified as a successful follow-up.

3.1.1. SOEP-Core

Table 3.1.: Number of Households (HH) to be Re-Contacted and the Proportion (p) of Successful Follow-Ups by survey year and sample (samples A to J).

	A		B		C		D		E		F		G		H		I		J	
syear	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p
1984	4,528	1.000	1,393	1.000																
1985	4,681	0.985	1,370	0.968																
1986	4,486	0.990	1,325	0.974																
1987	4,232	0.991	1,220	0.987																
1988	4,140	0.992	1,191	0.991																
1989	3,984	0.991	1,157	0.990																
1990	3,902	0.992	1,124	0.988	2,179	1.000														
1991	3,860	0.995	1,151	0.993	2,246	0.985														
1992	3,845	0.997	1,153	0.992	2,302	0.995														
1993	3,867	0.993	1,172	0.986	2,227	0.991														
1994	3,849	0.993	1,150	0.990	2,134	0.994	236	1.000												
1995	3,784	0.995	1,108	0.990	2,110	0.996	642	0.988												
1996	3,747	0.997	1,069	0.993	2,103	0.995	544	0.996												
1997	3,688	0.996	1,038	0.991	2,087	0.995	541	0.993												
1998	3,667	0.994	1,019	0.994	2,079	0.994	528	0.991	1,056	1.000										
1999	3,631	0.996	975	0.994	2,037	0.997	498	0.994	1,089	0.995										
2000	3,549	0.996	934	0.995	2,025	0.997	467	0.998	967	0.992	6,043	1.000								
2001	3,463	0.996	904	0.994	2,034	0.997	454	0.991	921	0.991	6,162	0.990								
2002	3,406	0.997	877	0.991	2,005	0.996	450	0.998	873	0.994	5,447	0.995	1,224	1.000						
2003	3,330	0.996	840	0.996	1,982	0.996	434	0.995	834	0.993	4,965	0.997	1,274	0.822						
2004	3,260	0.998	803	0.996	1,962	0.996	436	0.998	797	0.997	4,736	0.996	1,010	0.997						
2005	3,220	0.998	779	0.994	1,959	0.997	429	0.993	783	0.999	4,577	0.997	1,001	0.997						
2006	3,138	0.997	770	0.996	1,941	0.994	425	0.988	775	0.991	4,401	0.993	995	0.995	1,506	1.000				
2007	3,000	0.997	725	0.994	1,834	0.999	387	0.995	727	0.997	4,157	0.995	933	0.992	1,530	0.995				
2008	2,856	0.998	676	0.993	1,767	0.995	372	0.995	680	0.997	3,962	0.994	904	0.997	1,326	0.996				
2009	2,730	0.997	620	0.994	1,695	0.999	351	0.997	636	1.000	3,760	0.996	870	0.995	1,145	0.997	1,495	1.000		
2010	2,570	0.998	548	0.995	1,627	1.000	334	0.997	605	0.998	3,538	0.996	826	0.999	1,059	0.995	1,738	0.983		
2011	2,421	0.998	495	0.992	1,541	0.998	303	0.993	589	1.000	3,319	0.997	797	0.996	992	0.996			3,136	1.000
2012	2,289	0.998	440	0.998	1,466	0.999	286	1.000	116	0.991	3,076	0.999	774	0.997	928	0.999			3,205	0.992
2013	2,180	0.996	393	0.992	1,417	0.997	269	0.993	98	1.000	2,881	0.997	733	0.996	877	0.995			2,871	0.995
2014	2,078	0.994	361	0.994	1,351	0.996	249	1.000	90	1.000	2,741	0.997	725	0.993	828	0.994			2,519	0.991
2015	1,998	0.994	331	0.994	1,300	0.995	229	1.000	83	1.000	2,597	0.992	699	0.993	790	0.997			2,309	0.994
2016	1,861	0.996	296	0.997	1,217	0.997	208	0.995	83	0.964	2,412	0.994	669	0.987	720	0.996			2,119	0.995
2017	1,748	0.993	271	0.989	1,125	0.996	184	0.995	75	1.000	2,214	0.993	622	0.995	677	0.994			2,015	0.993
2018	1,641	0.994	236	1.000	1,060	0.992	174	0.994	69	1.000	2,070	0.994	608	0.990	641	0.997			1,916	0.993
2019	1,497	0.996	200	0.995	988	0.998	155	1.000	64	1.000	1,947	0.996	574	0.998	593	0.993			1,797	0.992
2020	1,370	0.999	172	0.994	905	0.997	148	1.000	59	1.000	1,766	0.997	542	0.998	526	0.998			1,668	0.995
2021	1,225	0.989	150	0.993	792	0.990	126	1.000	52	1.000	1,603	0.993	500	0.996	471	0.987			1,577	0.991
2022	1,097	0.990	127	0.961	693	0.978	115	0.991	43	1.000	1,417	0.994	456	0.998	418	0.995			1,418	0.987
2023	974	0.977	113	0.956	634	0.975	97	0.990	40	1.000	1,272	0.980	430	0.998	379	0.974			1,301	0.972
2024	851	0.981	101	0.980	570	0.977	91	0.989	36	0.972	1,120	0.985	386	0.992	331	0.982			1,140	0.977

Table 3.2.: Number of Households (HH) to be Re-Contacted and the Proportion (p) of Successful Follow-Ups by survey year and sample (samples K to S).

	K		L1		L2		L3		N		O		P		Q		R		S	
syear	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p
2010			2,074	1.000	2,500	1.000														
2011			2,104	0.978	2,325	0.958	924	1.000												
2012	1,526	1.000	1,878	0.990	2,275	0.977	951	0.979												
2013	1,565	0.990	1,753	0.993	2,177	0.988	920	0.991												
2014	1,448	0.994	1,512	0.994	2,027	0.982	836	0.986												
2015	1,308	0.993	1,404	0.994	1,880	0.984	789	0.978												
2016	1,209	0.993	1,287	0.995	1,736	0.986	732	0.982												
2017	1,105	0.995	1,209	0.993	1,587	0.986	686	0.978	2,314	1.000										
2018	1,067	0.990	1,151	0.989	1,494	0.981	650	0.982	2,644	0.989	935	1.000								
2019	987	0.994	1,086	0.994	1,451	0.977	621	0.973	2,335	0.993	943	0.981	1,960	1.000	477	1.000				
2020	908	0.992	1,027	0.998	1,384	0.970	579	0.967	2,147	0.996	786	0.992	1,978	0.994	480	0.996				
2021	861	0.998	985	0.991	1,334	0.976	570	0.963	2,069	0.989	714	0.959	1,691	0.990	470	0.989				
2022	785	0.995	917	0.986	1,313	0.977	578	0.974	1,882	0.993	667	0.955	1,542	0.981	455	0.991	6,696	1.000		
2023	712	0.975	856	0.970	1,320	0.962	579	0.957	1,730	0.976	596	0.946	1,385	0.981	438	0.975	6,732	0.978		
2024	615	0.980	799	0.975	1,273	0.952	557	0.955	1,558	0.976	519	0.965	1,202	0.983	405	0.975	5,728	0.974	5,314	1

3.1.2. IAB-SOEP-Migration Sample

Table 3.3.: Number of Households (HH) to be Re-Contacted and the Proportion (p) of Successful Follow-Ups by survey year and sample.

	M1		M2		M7		M8		M8b		M8c		M8d		M10	
syear	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p
2013	2,723	1.000														
2014	2,828	0.988														
2015	2,456	0.980			1,096	1.000										
2016	2,116	0.977			1,096	0.971										
2017	1,794	0.979			931	0.981										
2018	1,605	0.984			688	0.987										
2019	1,415	0.982			580	0.967										
2020	1,229	0.987			475	0.985	783	1.000	1,096	1.000						
2021	1,191	0.987			444	0.977	771	0.917	1,089	0.879						
2022	1,089	0.917			400	0.868	690	0.748	1,011	0.769	2,360	1.000				
2023	1,001	0.963			354	0.949	620	0.918	951	0.870	2,357	0.890	970	1.000		
2024	866	0.948	2,128	1	299	0.946	498	0.944	823	0.897	2,315	0.871	974	0.838	348	1

3.1.3. IAB-BAMF-SOEP Survey of Refugees

Table 3.4.: Number of Households (HH) to be Re-Contacted and the Proportion (p) of Successful Follow-Ups by survey year and sample.

	M3		M4		M5		M6		M9	
syear	HH	p	HH	p	HH	p	HH	p	HH	p
2016	1,678	1.000	1,611	1.000						
2017	1,740	0.913	1,723	0.955	1,519	1.000				
2018	1,527	0.937	1,584	0.941	1,585	0.932				
2019	1,266	0.929	1,352	0.935	1,491	0.883				
2020	1,035	0.944	1,104	0.947	1,180	0.922	1,141	1.000		
2021	864	0.944	935	0.934	933	0.930	1,149	0.911		
2022	832	0.964	900	0.956	892	0.946	1,089	0.938		
2023	778	0.936	850	0.902	818	0.912	1,000	0.886	4,869	1.000
2024	658	0.926	725	0.920	668	0.921	782	0.893	4,742	0.963

3.2. Predicting the Probability of Successful vs. Unsuccessful Follow-Ups

We aim to predict the probability of re-contacting a household relative to unsuccessful follow-up, based on household and interview level characteristics, as well as information on the interviewer and initial contact time. While in the past models were often not fitted due to low numbers of cases, grouping made it possible to address this issue, and models were estimated for all groups.

We present the coefficients of the models we estimated to adjust for contact as coefficient plots below. Tables containing exact values are provided in Appendix A. The coefficient plot shows characteristics that were included as explanatory variables on the y-axis. Parallel to the x-axis are the values of the estimated coefficients (dots) together with their 95% confidence interval (bars with vertical ends). The dashed vertical line marks the value 0. The estimated coefficients are sorted from the smallest (top left) to the largest (bottom right). Characteristics whose coefficient estimates lie to the left of the dashed line indicate a negative influence. Characteristics whose coefficient estimates lie to the right of the dashed line indicate a positive influence.

The characteristics contain several abbreviations. These are HH = household, P = person, I = INKAR, M = microm, No = number of, and So = share of. Interaction terms can be identified by the X between to characteristics.

3.2.1. SOEP-Core

Figure 3.1 shows the estimated coefficients of the model explaining successful contact in SOEP-Core. For the exact values of the estimated coefficients, see Table A.2 in Appendix A. The samples are grouped by A to L3, NOPQ, R.

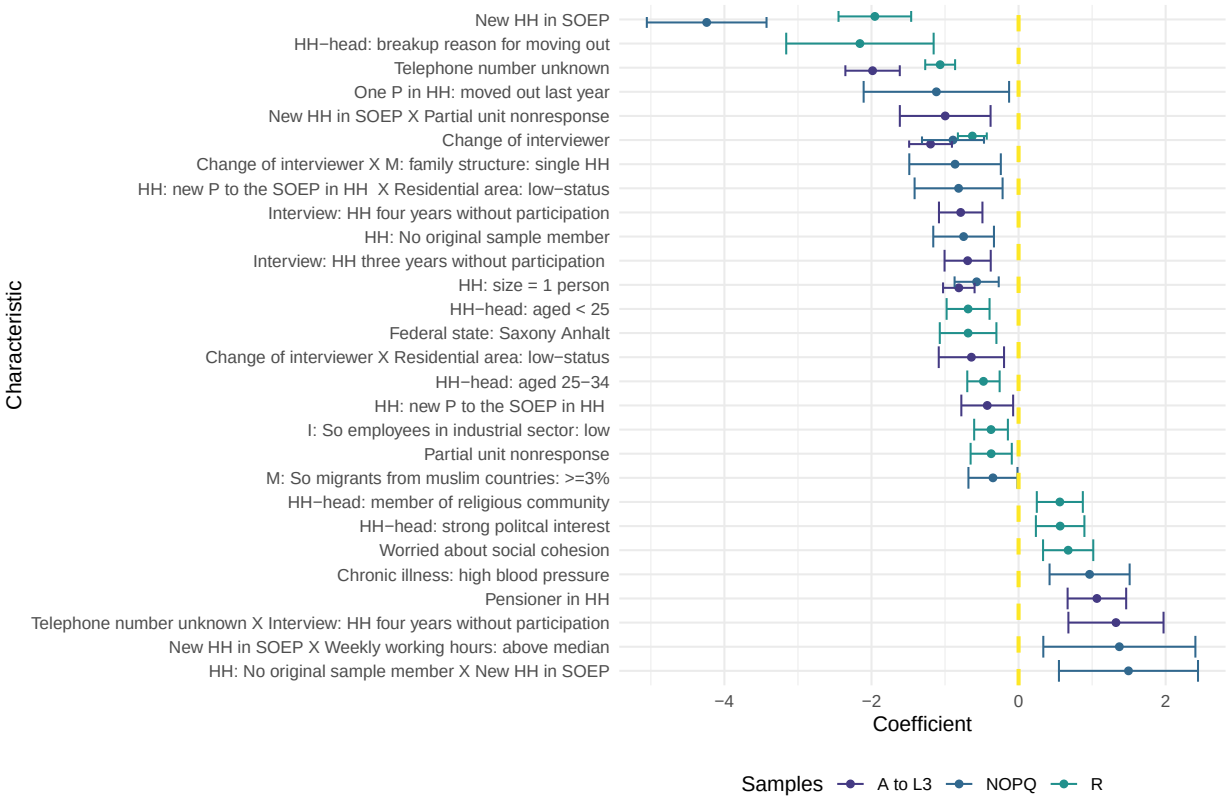

Figure 3.1.: Coefficient plot of the model estimating successful follow-ups in SOEP-Core.

3.2.2. IAB-SOEP Migration Sample

Figure 3.2 shows the estimated coefficients of the model explaining successful contact in the IAB-SOEP Migration Sample. For the exact values of the estimated coefficients, see Table A.3 in Appendix A. The samples are grouped by M1 / M2, M7, M8, M8b, M8c.

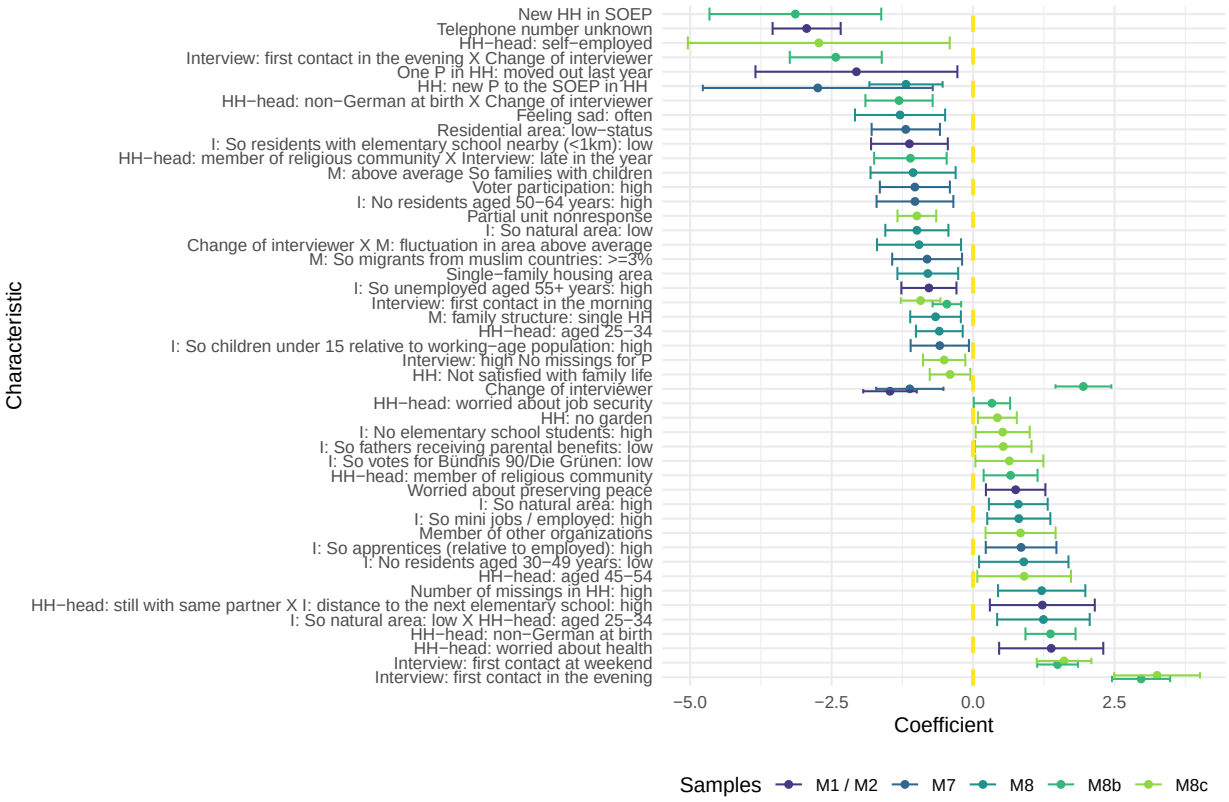

Figure 3.2.: Coefficient plot of the model estimating successful follow-ups in IAB-SOEP Migration Sample.

3.2.3. IAB-BAMF-SOEP Survey of Refugees

Figure 3.3 shows the estimated coefficients of the model explaining successful contact in the IAB-BAMF-SOEP Survey of Refugees. For the exact values of the estimated coefficients, see Table A.4 in Appendix A. The samples are grouped by M3 to M6, M9ROW, M9UKR.

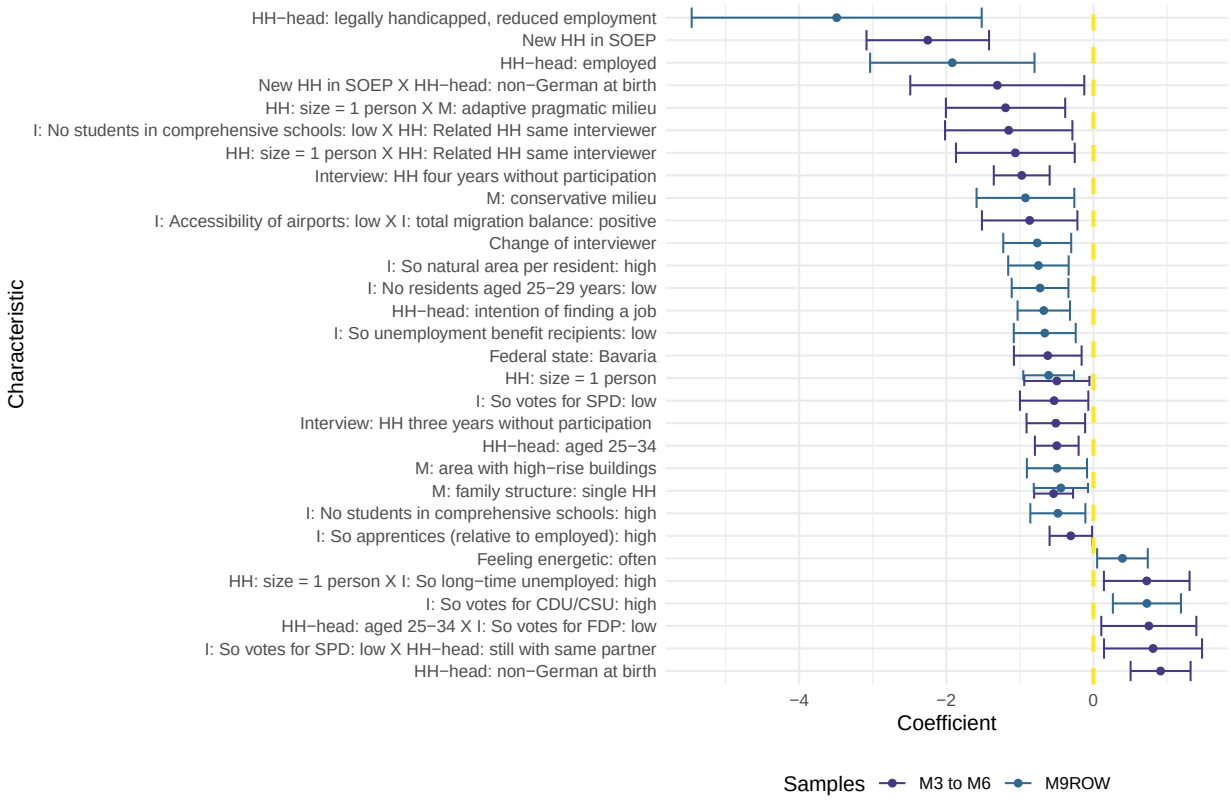

Figure 3.3.: Coefficient plot of the model estimating successful follow-ups in IAB-BAMF-SOEP Survey of Refugees.

4. Panel Attrition Due to Refusals

4.1. The Frequency of Participation

In each panel wave, after having identified the location of households from the preceding wave, the second step toward successful re-interviewing is to confirm each household's willingness to participate. We define successful re-interviewing relative only to survey-related panel attrition, such as refusals, and ignore survey-unrelated attrition, such as the death of a participant or her decision to move abroad, to generate the longitudinal weights.

Tables 4.1, 4.2, 4.3, and 4.4 display the Number of successfully contacted households (HH) and the participation rates (p) due to refusal by sample and wave. The corresponding drop-out rates can then be obtained following an analogous procedure. Note that in order to obtain this probability no distinction was made between the various types of refusals due to unconditional rejection, lack of time, or health issues.

4.1.1. SOEP-Core

Table 4.1.: Number of Households (HH) successfully Re-Contacted and the Proportion (p) of Participation by survey year and sample (samples A to J).

	A		B		C		D		E		F		G		H		I		J	
syear	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p
1984	4,528	0.000	1,393	0.000																
1985	4,611	0.898	1,326	0.891																
1986	4,442	0.892	1,290	0.874																
1987	4,194	0.932	1,204	0.927																
1988	4,105	0.912	1,180	0.908																
1989	3,949	0.924	1,146	0.910																
1990	3,871	0.933	1,111	0.925	2,179	1.000														
1991	3,842	0.940	1,143	0.924	2,213	0.917														
1992	3,833	0.935	1,144	0.927	2,290	0.882														
1993	3,838	0.939	1,156	0.920	2,208	0.892														
1994	3,821	0.936	1,139	0.898	2,122	0.923	236	1.000												
1995	3,766	0.936	1,097	0.895	2,101	0.922	634	0.823												
1996	3,734	0.933	1,061	0.905	2,092	0.933	542	0.919												
1997	3,674	0.941	1,029	0.905	2,076	0.935	537	0.892												
1998	3,645	0.929	1,013	0.886	2,066	0.913	523	0.843	1,056	1.000										
1999	3,616	0.920	969	0.885	2,030	0.933	495	0.859	1,084	0.817										
2000	3,535	0.917	929	0.883	2,018	0.931	466	0.912	959	0.878	6,043	1.000								
2001	3,448	0.919	899	0.900	2,028	0.912	450	0.884	913	0.888	6,100	0.805								
2002	3,396	0.920	869	0.881	1,996	0.911	449	0.895	868	0.891	5,420	0.846	1,224	1.000						
2003	3,318	0.926	837	0.886	1,974	0.915	432	0.924	828	0.899	4,951	0.886	1,047	0.870						
2004	3,253	0.925	800	0.892	1,955	0.927	435	0.892	795	0.921	4,719	0.897	1,007	0.898						
2005	3,214	0.914	774	0.902	1,954	0.906	426	0.890	782	0.903	4,564	0.892	998	0.881						
2006	3,130	0.901	767	0.854	1,930	0.890	420	0.857	768	0.893	4,370	0.891	990	0.868	1,506	1.000				
2007	2,992	0.910	721	0.852	1,832	0.903	385	0.896	725	0.892	4,138	0.893	926	0.890	1,523	0.780				
2008	2,850	0.907	671	0.849	1,759	0.905	370	0.886	678	0.888	3,939	0.892	901	0.873	1,321	0.819				
2009	2,723	0.890	616	0.812	1,693	0.907	350	0.874	636	0.903	3,746	0.882	866	0.874	1,142	0.872	1,495	1.000		
2010	2,565	0.875	545	0.809	1,627	0.883	333	0.835	604	0.916	3,523	0.867	825	0.901	1,054	0.866	1,709	0.688		
2011	2,417	0.889	491	0.796	1,538	0.881	301	0.884	589	0.925	3,308	0.872	794	0.889	988	0.868			3,136	1.000
2012	2,285	0.890	439	0.788	1,465	0.896	286	0.878	115	0.800	3,073	0.879	772	0.890	927	0.882			3,179	0.804
2013	2,172	0.897	390	0.823	1,413	0.885	267	0.869	98	0.837	2,873	0.893	730	0.927	873	0.897			2,857	0.807
2014	2,065	0.908	359	0.841	1,346	0.900	249	0.855	90	0.867	2,732	0.884	720	0.890	823	0.889			2,497	0.845
2015	1,986	0.886	329	0.815	1,294	0.874	229	0.843	83	0.843	2,577	0.882	694	0.873	788	0.868			2,296	0.864
2016	1,853	0.879	295	0.773	1,213	0.885	207	0.836	80	0.850	2,398	0.873	660	0.894	717	0.891			2,108	0.893
2017	1,736	0.880	268	0.750	1,120	0.890	183	0.902	75	0.893	2,199	0.895	619	0.906	673	0.883			2,001	0.888
2018	1,631	0.861	236	0.750	1,051	0.884	173	0.850	69	0.855	2,058	0.880	602	0.885	639	0.858			1,902	0.890
2019	1,491	0.860	199	0.759	986	0.842	155	0.877	64	0.859	1,940	0.852	573	0.888	589	0.834			1,783	0.863
2020	1,369	0.854	171	0.795	902	0.854	148	0.838	59	0.881	1,761	0.871	541	0.887	525	0.878			1,660	0.885
2021	1,212	0.629	149	0.544	784	0.608	126	0.619	52	0.558	1,592	0.657	498	0.729	465	0.686			1,563	0.687
2022	1,086	0.692	122	0.557	678	0.718	114	0.658	43	0.674	1,409	0.714	455	0.793	416	0.733			1,399	0.702
2023	952	0.623	108	0.537	618	0.610	96	0.615	40	0.450	1,246	0.652	429	0.711	369	0.640			1,265	0.643
2024	835	0.644	99	0.525	557	0.637	90	0.644	35	0.629	1,103	0.659	383	0.731	325	0.655			1,114	0.684

Table 4.2.: Number of Households (HH) successfully Re-Contacted and the Proportion (p) of Participation by survey year and sample (samples K to S).

	K		L1		L2		L3		N		O		P		Q		R		S	
syear	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p
2010			2,074	1.000	2,500	1.000														
2011			2,057	0.801	2,228	0.879	924	1.000												
2012	1,526	1.000	1,859	0.789	2,222	0.858	931	0.872												
2013	1,549	0.827	1,741	0.782	2,151	0.839	912	0.829												
2014	1,439	0.825	1,503	0.830	1,990	0.712	824	0.727												
2015	1,299	0.853	1,396	0.848	1,850	0.745	772	0.763												
2016	1,201	0.871	1,280	0.877	1,712	0.739	719	0.750												
2017	1,099	0.898	1,200	0.879	1,564	0.797	671	0.778	2,314	1.000										
2018	1,056	0.884	1,138	0.871	1,465	0.799	638	0.793	2,615	0.808	935	1.000								
2019	981	0.853	1,079	0.829	1,418	0.791	604	0.780	2,318	0.815	925	0.674	1,960	1.000	477	1.000				
2020	901	0.883	1,025	0.845	1,343	0.809	560	0.805	2,139	0.862	780	0.728	1,967	0.625	478	0.885				
2021	859	0.742	976	0.671	1,302	0.703	549	0.707	2,047	0.664	685	0.574	1,674	0.504	465	0.761				
2022	781	0.729	904	0.653	1,283	0.716	563	0.680	1,869	0.674	637	0.568	1,512	0.598	451	0.758	6,696	0.980		
2023	694	0.628	830	0.578	1,270	0.576	554	0.599	1,689	0.612	564	0.507	1,359	0.495	427	0.705	6,587	0.413		
2024	603	0.667	779	0.594	1,212	0.600	532	0.586	1,521	0.646	501	0.485	1,181	0.523	395	0.696	5,577	0.415	5,314	1

4.1.2. IAB-SOEP-Migration Sample

Table 4.3.: Number of Households (HH) successfully Re-Contacted and the Proportion (p) of Participation by survey year and sample.

	M1		M2		M7		M8		M8b		M8c		M8d		M10	
syear	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p	HH	p
2013	2,723	1.000														
2014	2,793	0.720														
2015	2,407	0.693			1,096	1.000										
2016	2,067	0.722			1,064	0.620										
2017	1,757	0.768			913	0.612										
2018	1,579	0.762			679	0.717										
2019	1,389	0.742			561	0.697										
2020	1,213	0.785			468	0.735	783	1.000	1,096	1.000						
2021	1,175	0.545			434	0.521	707	0.239	957	0.383						
2022	999	0.516			347	0.444	516	0.275	777	0.364	2,360	0.989				
2023	964	0.421			336	0.345	569	0.202	827	0.312	2,098	0.602	970	1.000		
2024	821	0.462	2,128	1	283	0.367	470	0.166	738	0.282	2,017	0.589	816	0.681	348	1

4.1.3. IAB-BAMF-SOEP Survey of Refugees

Table 4.4.: Number of Households (HH) successfully Re-Contacted and the Proportion (p) of Participation by survey year and sample.

	M3		M4		M5		M6		M9	
syear	HH	p	HH	p	HH	p	HH	p	HH	p
2016	1,678	0.997	1,611	0.993						
2017	1,589	0.685	1,645	0.765	1,519	1.000				
2018	1,431	0.684	1,491	0.710	1,477	0.680				
2019	1,176	0.700	1,264	0.744	1,316	0.706				
2020	977	0.782	1,046	0.795	1,088	0.746	1,141	1.000		
2021	816	0.500	873	0.513	868	0.487	1,047	0.365		
2022	802	0.411	860	0.422	844	0.377	1,022	0.304		
2023	728	0.327	767	0.319	746	0.326	886	0.245	4,869	1.000
2024	609	0.430	667	0.430	615	0.446	698	0.271	4,568	0.665

4.2. Predicting the Probability of Re-Interviewing vs. Refusal

Based on the previous year's household and interview characteristics and recent regional information, we aim to predict the probability of agreement vs. refusal to participate in the survey for households that were re-contacted in 2024 The individual attributes aggregated at the household level mostly refer to the head of the household in the previous wave. For split-off households, the attributes are based on the information of the person who moved out of the panel household (in the case of several persons, the first person mentioned in the address protocol). In many other cases, personal information is aggregated at the level of households, for instance, rare events, such as the presence of individuals with an acute medical condition.

We present the coefficients of the models we estimated to adjust for participation as coefficient plots below. Tables containing exact values are provided in Appendix A. The coefficient plot shows charac-

teristics that were included as explanatory variables on the y-axis. Parallel to the x-axis are the values of the estimated coefficients (dots) together with their 95% confidence interval (bars with vertical ends). The dashed vertical line marks the value 0. The estimated coefficients are sorted from the smallest (top left) to the largest (bottom right). Characteristics whose coefficient estimates lie to the left of the dashed line indicate a negative influence. Characteristics whose coefficient estimates lie to the right of the dashed line indicate a positive influence.

The characteristics contain several abbreviations. These are HH = household, P = person, I = INKAR, M = microm, No = number of, and So = share of. Interaction terms can be identified by the X between to characteristics.

4.2.1. SOEP-Core

Figure 4.1 shows the estimated coefficients of the model explaining participation in SOEP-Core. For the exact values of the estimated coefficients, see Table A.2 in Appendix A. The samples are grouped by A to L3, NOPQ, R.

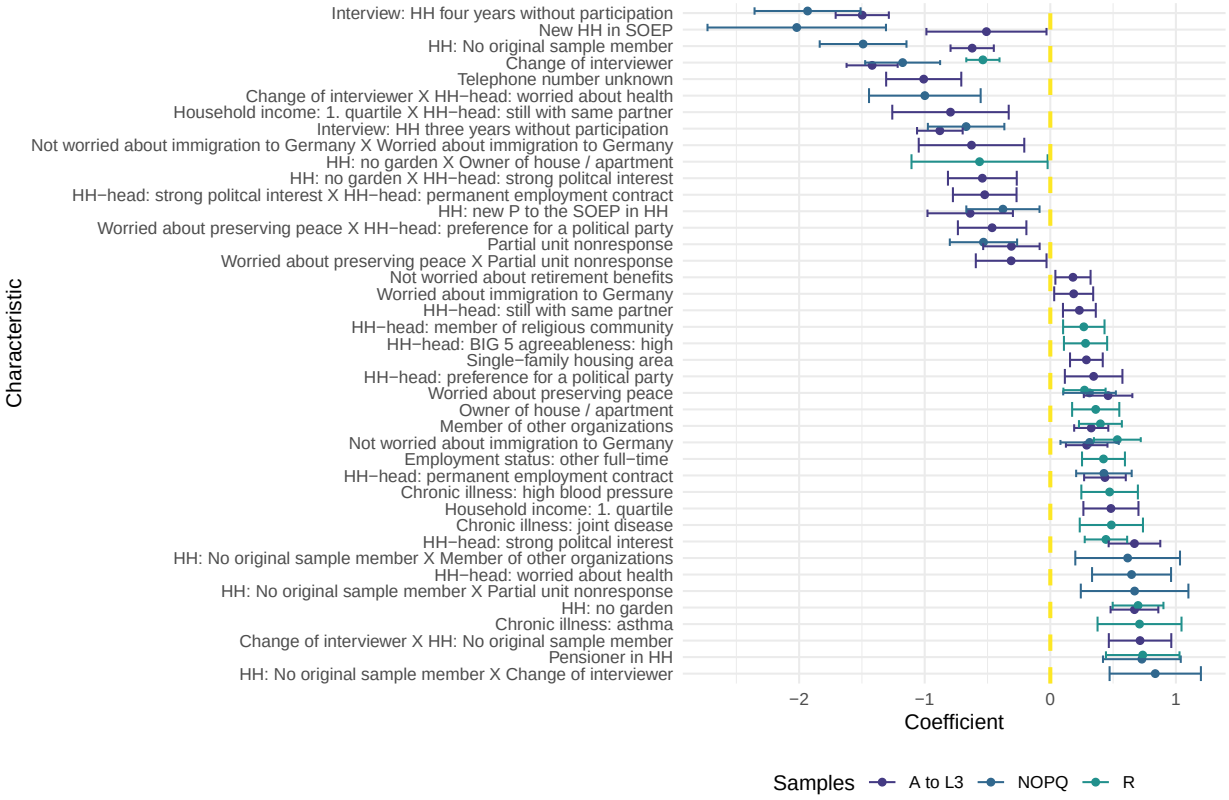

Figure 4.1.: Coefficient plot of the model estimating successful re-interviewing in SOEP-Core.

4.2.2. IAB-SOEP Migration Sample

Figure 4.2 shows the estimated coefficients of the model explaining participation in the IAB-SOEP Migration Sample. For the exact values of the estimated coefficients, see Table A.3 in Appendix A. The samples are grouped by M1 / M2, M7, M8, M8b, M8c.

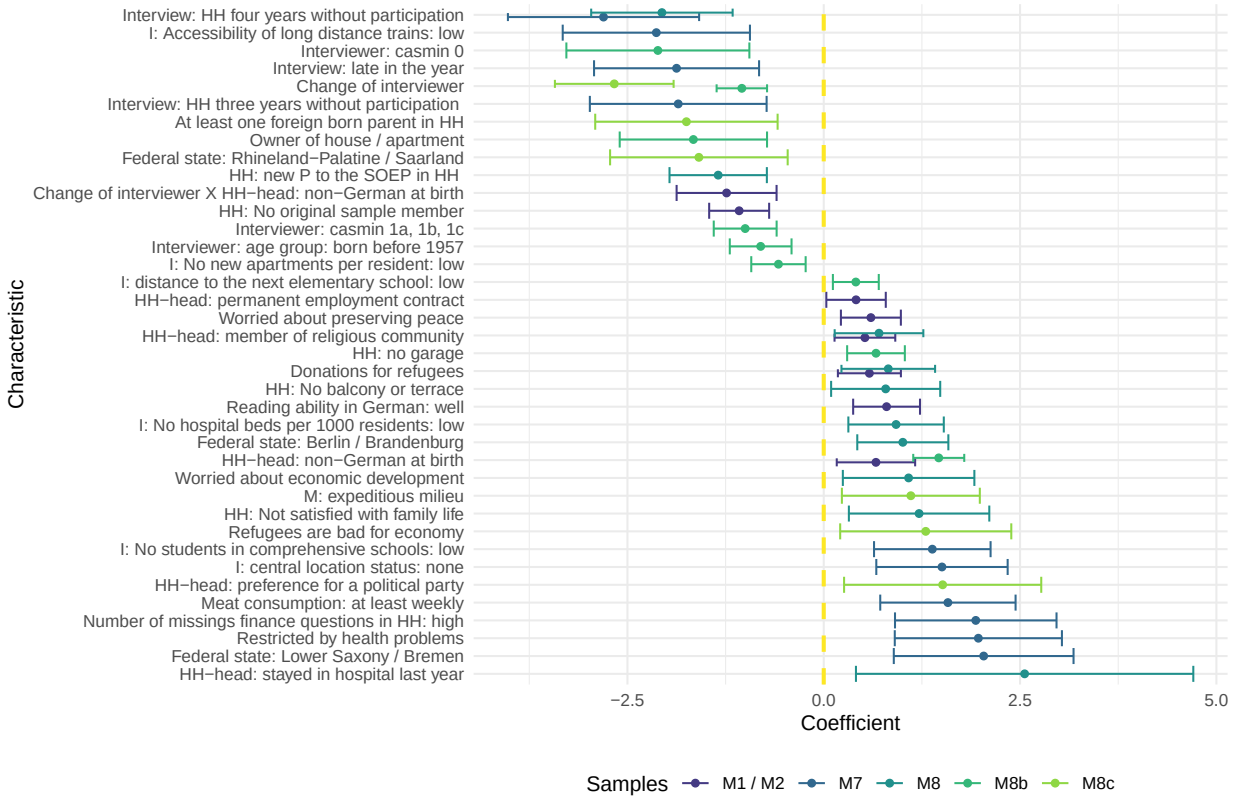

Figure 4.2.: Coefficient plot of the model estimating successful re-interviewing in IAB-SOEP Migration Sample.

4.2.3. IAB-BAMF-SOEP Survey of Refugees

Figure 4.3 shows the estimated coefficients of the model explaining participation in the IAB-BAMF-SOEP Survey of Refugees. For the exact values of the estimated coefficients, see Table A.4 in Appendix A. The samples are grouped by M3 to M6, M9ROW, M9UKR.

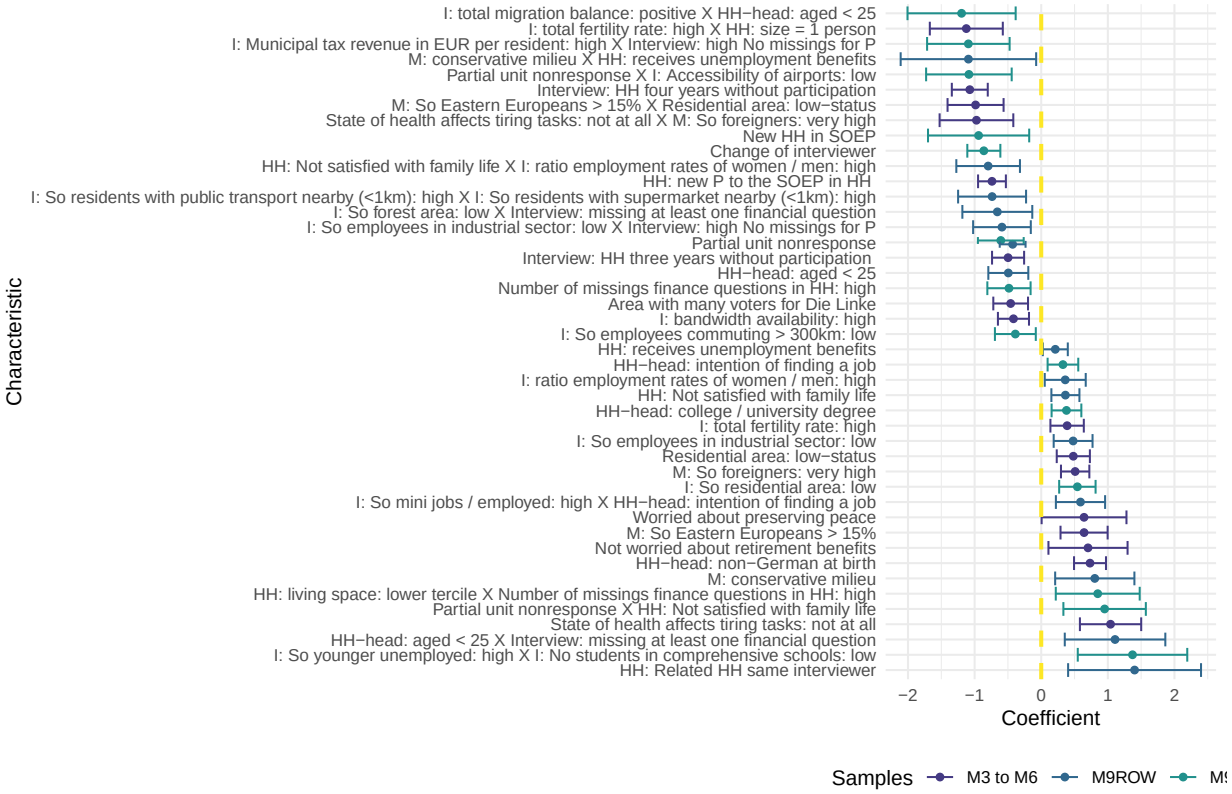

Figure 4.3.: Coefficient plot of the model estimating successful re-interviewing in IAB-BAMF-SOEP Survey of Refugees.

5. Margins used in the Post-Stratification Process

For post-stratification, we use different sources. We use distributions and totals from the German Microcensus for all samples of the SOEP. For the IAB-BAMF-SOEP Survey of Refugees we also use distributions and totals from the Central Register of Foreigners.

5.1. Margins from the German Microcensus

Some of the margins used in the process of post-stratification are applied to the entire SOEP, i.e. the SOEP-Core, the IAB-SOEP Migration Sample, and the IAB-BAMF-SOEP Survey of Refugees. The according distributions and totals are obtained by requesting a special analysis from the German Microcensus. The German Microcensus is a 1% sample of the German population that, like the SOEP, focuses on private households. It is a rotating panel with a complex design itself. In contrast to the SOEP the sampling design is stable and participation is mandatory.

The margins estimated from the German Microcensus are used as population benchmarks and cover the number of households by:

- federal states (Schleswig-Holstein (SH), Hamburg (HH), Lower Saxony (NI), Bremen (HB), North Rhine-Westphalia (NW), Hesse (HE), Rhineland-Palatinate (RP), Baden-Wuerttemberg (BW), Bavaria (BY), Saarland (SL), Berlin (BE), Brandenburg (BB), Mecklenburg-Western Pomerania (MV), Saxony (SN), Saxony-Anhalt (ST), Thuringia (TH))
- household typology (single, two person no children, two adults no more than two children, two adults with more than two children, single parents with no more than two children, single parents with more than two children, others)
- household size (number of persons: 1, 2, 3, 4, 5 or more)
- municipality size (number of inhabitants: less than 5000, 5000 up to 20000, 20000 up to 50000, 50000 up to 100000, 100000 up to 200000, 200000 up to 500000, 500000 or more)
- ownership (owner vs. tenant)

On the person level the margins computed cover the number of persons by

- joint distribution of age and sex with
  - age in years (grouped into: younger than 5, 5 up to 9, ..., 65 up to 69, 70 and older)
  - sex (male or female)
- first citizenship (German or other)
- migration background (no, direct, indirect)
- immigration year (before 1979, 1980-1984, 1985-1989, 1990-1994, 1995-1999, 2000-2004, 2005-2009, 2010-2013, 2014-2020, 2020-YYYY, with YYYY being the last immigration year covered by sampled populations)
- nationality (German only, EU Country, United Kingdom, Former Yugoslavia, Turkey, CIS Countries, Rest of the world)
- household typology (1 adult and 0 children, 2 adults and 0 children, 3 adults and 0 children, 4 or more adults and 0 children, 1 adult and 1 or more children, 2 adults and 1 child, 2 adults and 2 children, 2 adults and 3 or more children, 3 adults and 1 or more children, 4 or more adults and 1 or more children)

Moreover, we aggregate information from the person level to the household level. This aggregation is done when at least one person has the corresponding characteristic. These characteristics cover immigration year, nationality and indirect migration background.

5.2. Margins from the Central Register of Foreigners

Specifically for the IAB-BAMF-SOEP Survey of Refugees, we draw on additional margins derived from the Central Register of Foreigners (AZR). Each of the following marginal distributions is available as a joint distribution with age in years (grouped). The marginal distributions derived from the Central Register of Foreigners cover the number of refugees by

- federal states (Schleswig-Holstein (SH), Hamburg (HH), Lower Saxony (NI), Bremen (HB), North Rhine-Westphalia (NW), Hesse (HE), Rhineland-Palatinate (RP), Baden-Wuerttemberg (BW), Bavaria (BY), Saarland (SL), Berlin (BE), Brandenburg (BB), Mecklenburg-Western Pomerania (MV), Saxony (SN), Saxony-Anhalt (ST), Thuringia (TH))
- age in years (grouped into: unknown, 0-1, 2-4, 5-9, 10-14, 15-17, 18-20, 21-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60 and older)
- sex (male/unknown/divers or female)
- nationality (Syria, Afghanistan, Iraq, Albania, Serbia, Kosovo, Eritrea, Somalia, Iran, Pakistan, Russian Federation, Turkey, Nigeria, Guinea, Gambia, other)
- date of immigration (grouped into 1. quarter 2013, 2. quarter 2013, 3. quarter 2013, 4. quarter 2013, 1. quarter 2014, ..., 1. quarter YYYY, 2. quarter YYYY, 3. quarter YYYY, , with YYYY being the last immigration year covered by sampled populations)

5.3. Weights generated in the Post-Stratification Process

We generate three sets of weights on each level (household and person). First, we provide a weight for the cross-section of a new sample in its first wave. Second, for the same survey year a new sample is added to the SOEP, we generate a weight for this survey year without the new sample. Third, we integrate the new sample into the SOEP and provide the corresponding weights. The following Table 5.1 provides guidance on where to find which weight.

Table 5.1.: Combinations of data set formats, levels, and weights and where to find them.

		Long format		Wide format	
Level	Weight for...	Data set	Variable	Data set	Variable
household	new sample only	HPATHL	hhrf0	HHRF	bnhhrfr
household	panel without new sample	HPATHL	hhrf1	HHRF	bnhhrfar
household	panel with new sample	HPATHL	hhrf	HHRF	bnhhrf
household	staying probability	HPATHL	hbleib	HHRF	bnhbleib
person	new sample only	PPATHL	phrf0	PHRF	bnphrfr
person	panel without new sample	PPATHL	phrf1	PHRF	bnphrfar
person	panel with new sample	PPATHL	phrf	PHRF	bnphrf
person	staying probability	PPATHL	pbleib	PHRF	bnpbleib

5.3.1. Weights for new Samples only

Weights that correspond to a new sample in its first wave are post-stratified for the specific population they cover. For samples of SOEP-Core and the IAB-SOEP Migration Sample we use margins

obtained from the German Microcensus. For samples of IAB-BAMF-SOEP Survey of Refugees we make use of distributions derived from the Central Register of Foreigners. For more details on the post-stratification of samples in their first wave, see Chapter 1 and documentations linked under *Further readings* of the corresponding sample.

5.3.2. Weights for the Panel without a new Sample

The weights for the current survey year without the new sample are post-stratified using the same set of margins we apply in the panel. These weights do not include the households and persons of a new sample in the same survey year.

5.3.3. Weights for the Panel (including a new Sample)

This set of weights integrates a new sample (if there is one) into the panel sample using re-weighting methods. For a detailed overview on the integration of new samples into the SOEP, see Kroh, Siegers, and Kühne (2015). To post-stratify this set of weights we use the set of margins listed above.

6. Summary Statistics of the Derived Longitudinal and Cross-Sectional Weights

Based on the regression models of successful vs. unsuccessful re-contacts (see Chapter 3) and agreements vs. refusals to participate (see Chapter 4), we derive two sets of predicted probabilities, the product of which gives the household's staying probability. The inverse of the probability of staying in the SOEP in 2024 based on characteristics measured in 2023, variables `hbleib` and bohbleib, serves as longitudinal weighting variable which itself corrects for selective attrition between waves 2023 and 2024 (or BN and BO accordingly). The inverse of the probability of staying in the SOEP can naturally only be estimated from the second wave onward. For this reason samples in their first wave are not displayed.

The product of the cross-sectional weight in 2023, variable bnhhrf, and the longitudinal weight in 2024, variable bohbleib, provide the raw data, in the data set `HHRF`, for the cross-sectional weight in 2024. In a final step, the post-stratification of the cross-sectional weights corrects them to meet benchmarks of known marginal distribution characteristics of the underlying population as of the year 2024, see Chapter 5.

The final weights are provided in wide- and long-format data sets at the household and person level, see Table 5.1 in Chapter 5. The wide-format data set at the household level is `HHRF` containing both the inverse staying probability bohbleib as well as the final weight bohhrf for the survey year 2024. Accordingly cross-sectional person level weights are provided in data set `PHRF` in variable bophrf. In the long-format data sets the same weights at the household level can be found in `HPATHL` in variable `hhrf` for `syear == 2024`. Person level weights are available in data set `PPATHL` in variable `phrf`.

In the following Sections we show sample-specific density plots for each year displaying the inverse staying probabilities, the household- and the person-level weights for the three groups SOEP-Core, IAB-SOEP Migration Sample, and IAB-BAMF-SOEP Survey of Refugees. Please note that in sample D 98 households recruited via respondent-driven sampling cannot be assigned inclusion probabilities and therefore receive no weights, see Section 1.1.5. Further, all of the distributions are truncated at the 90%-percentile for ease of display. On the right hand side of the distribution the number of households or persons with valid values is displayed.

6.1. Inverse Staying Probabilities

6.1.1. SOEP-Core

Starting with Figure 6.1 we display density plots for longitudinal weights for each wave of SOEP-Core and Figure 6.6 displays sample specific density plots of the longitudinal weights for survey year 2024.

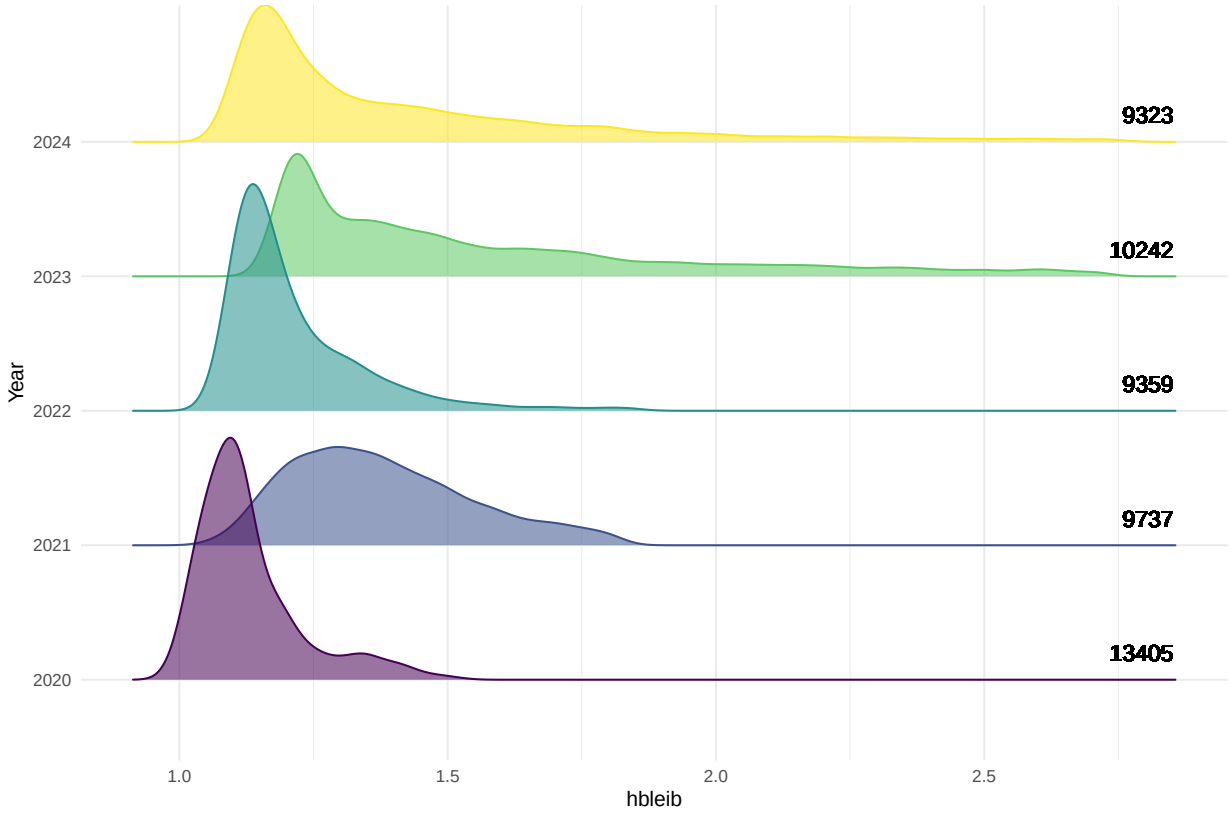

Figure 6.1.: Density plots for inverse staying probabilities hbleib by survey year (years 2020-2024).

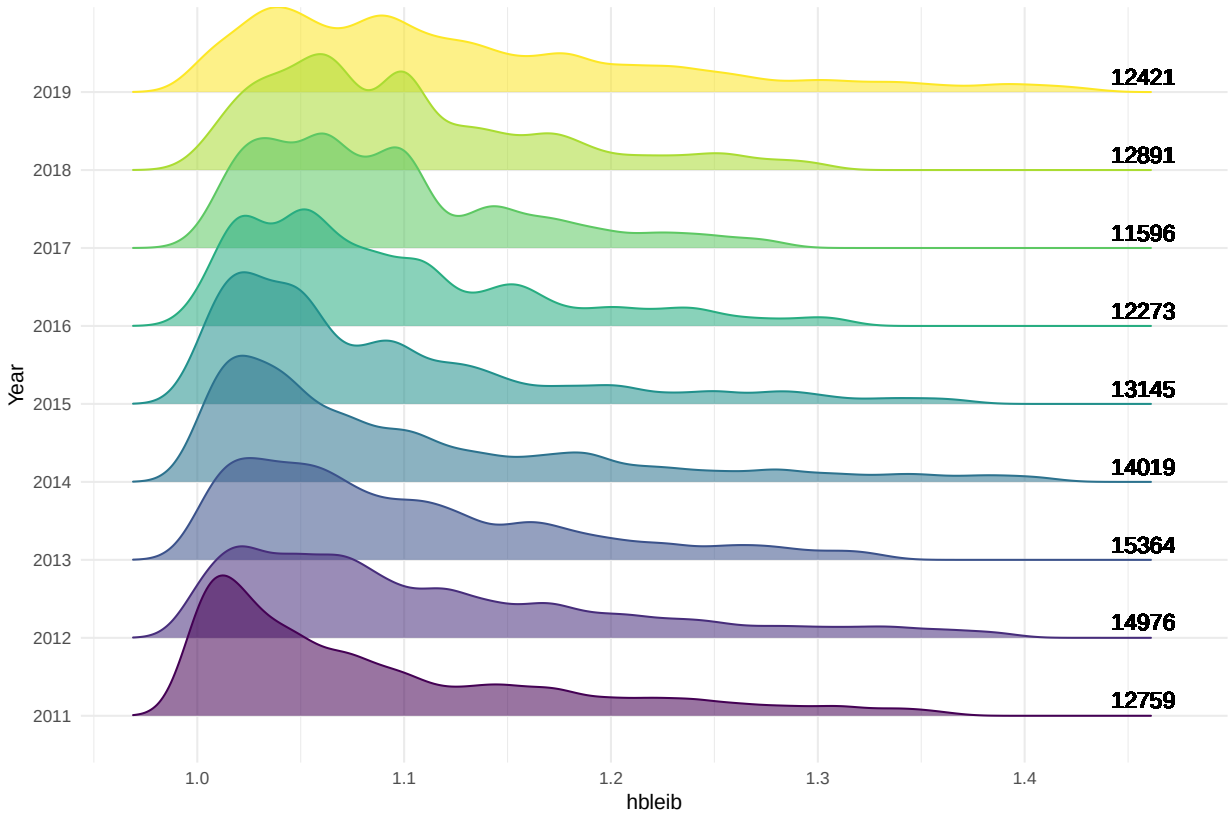

Figure 6.2.: Density plots for inverse staying probabilities hbleib by survey year (years 2011-2020).

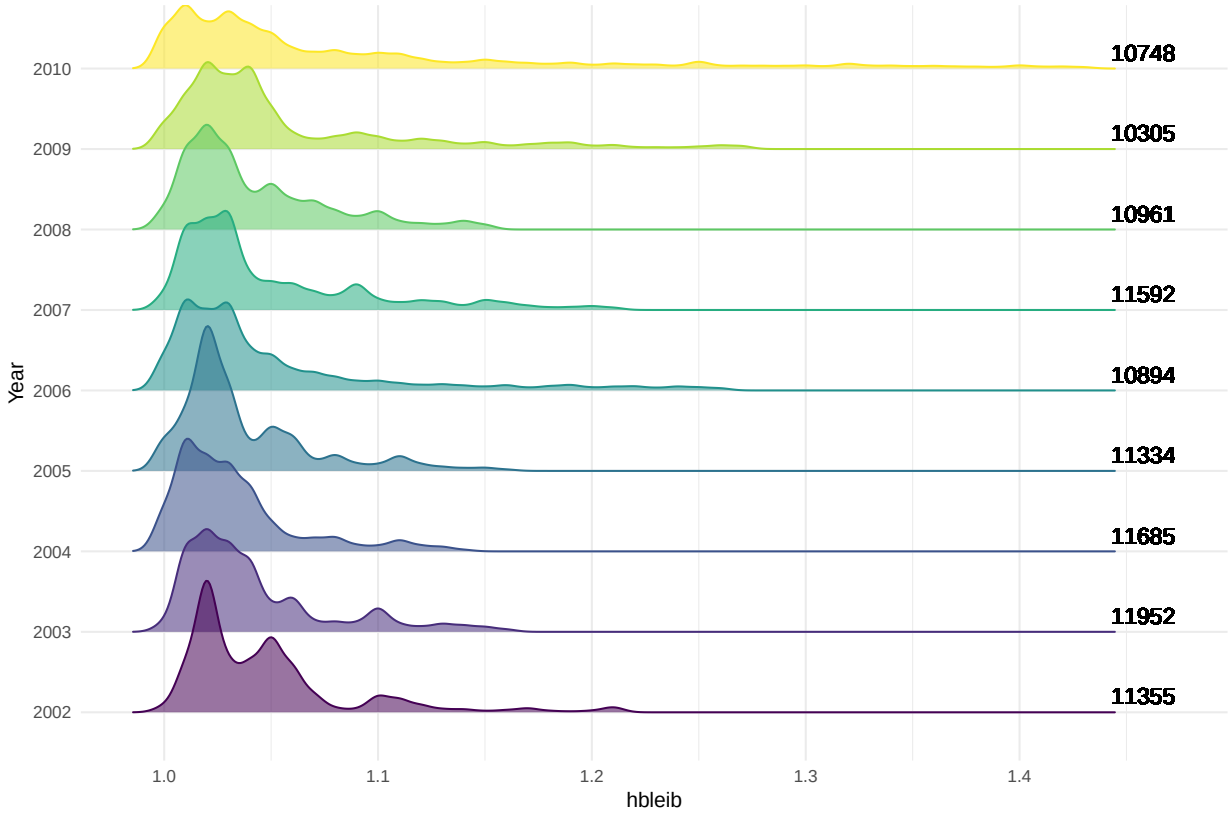

Figure 6.3.: Density plots for inverse staying probabilities hbleib by survey year (years 2002-2011).

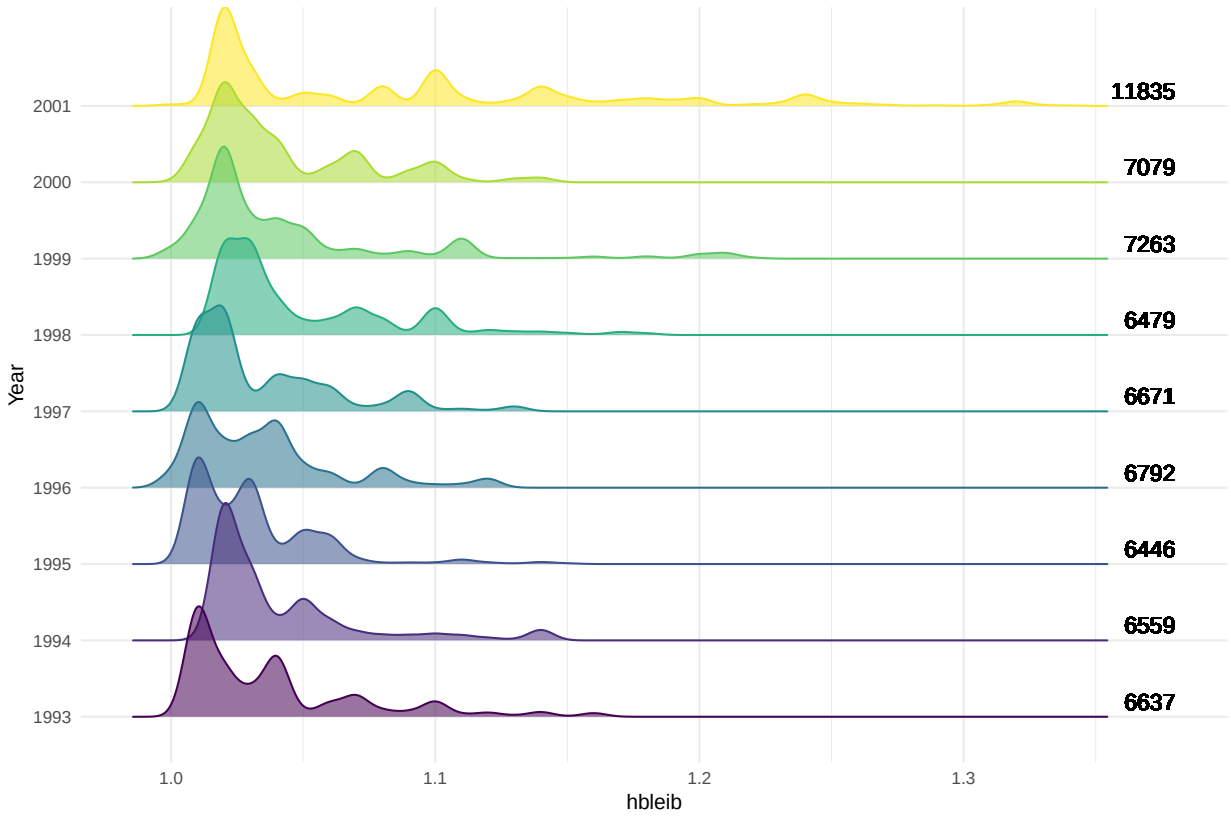

Figure 6.4.: Density plots for inverse staying probabilities hbleib by survey year (years 1993-2002).

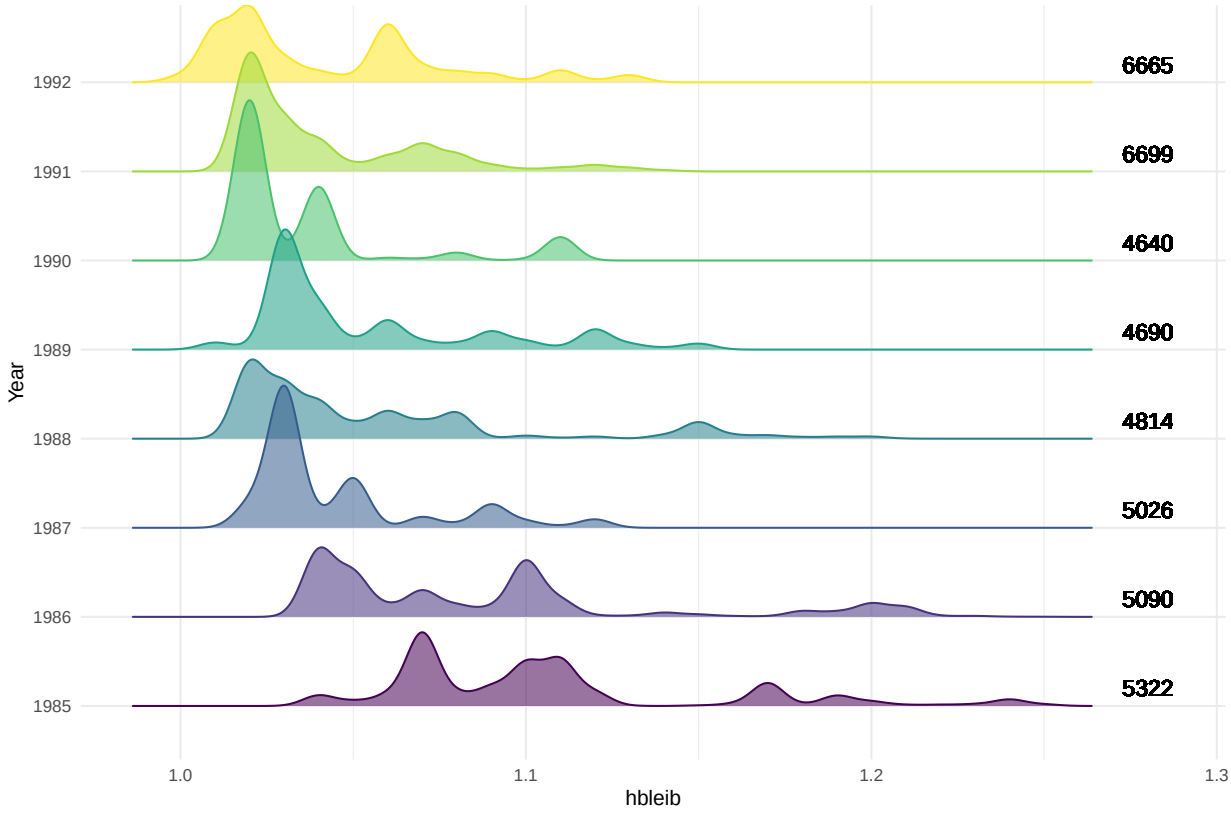

Figure 6.5.: Density plots for inverse staying probabilities hbleib by survey year (years 1984-1993).

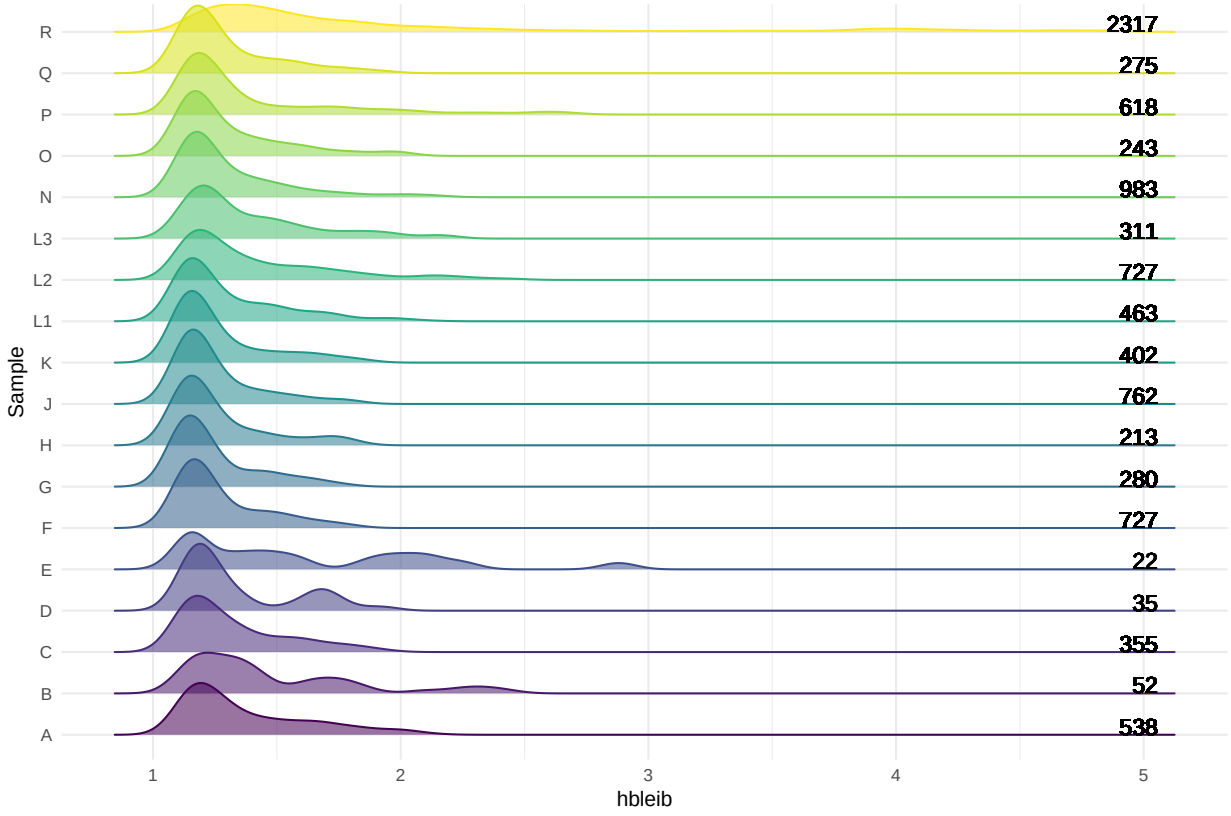

Figure 6.6.: Density plots for inverse staying probabilities hbleib by sample for survey year 2024.

6.1.2. IAB-SOEP Migration Sample

Figure 6.7 displays the density plots for longitudinal weights for each wave of the IAB-SOEP Migration Sample and Figure 6.8 displays sample specific density plots of the longitudinal weights for survey year 2024.

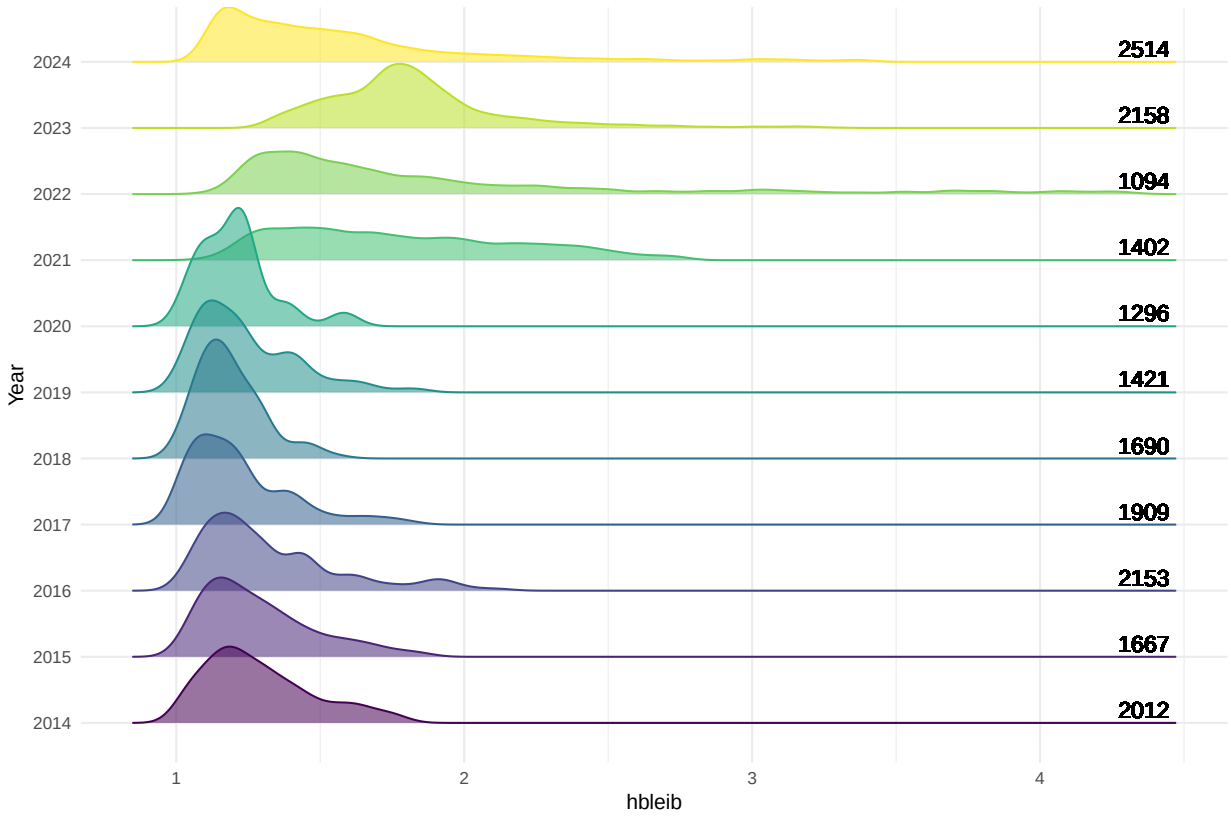

Figure 6.7.: Density plots for inverse staying probabilities hbleib by survey year.

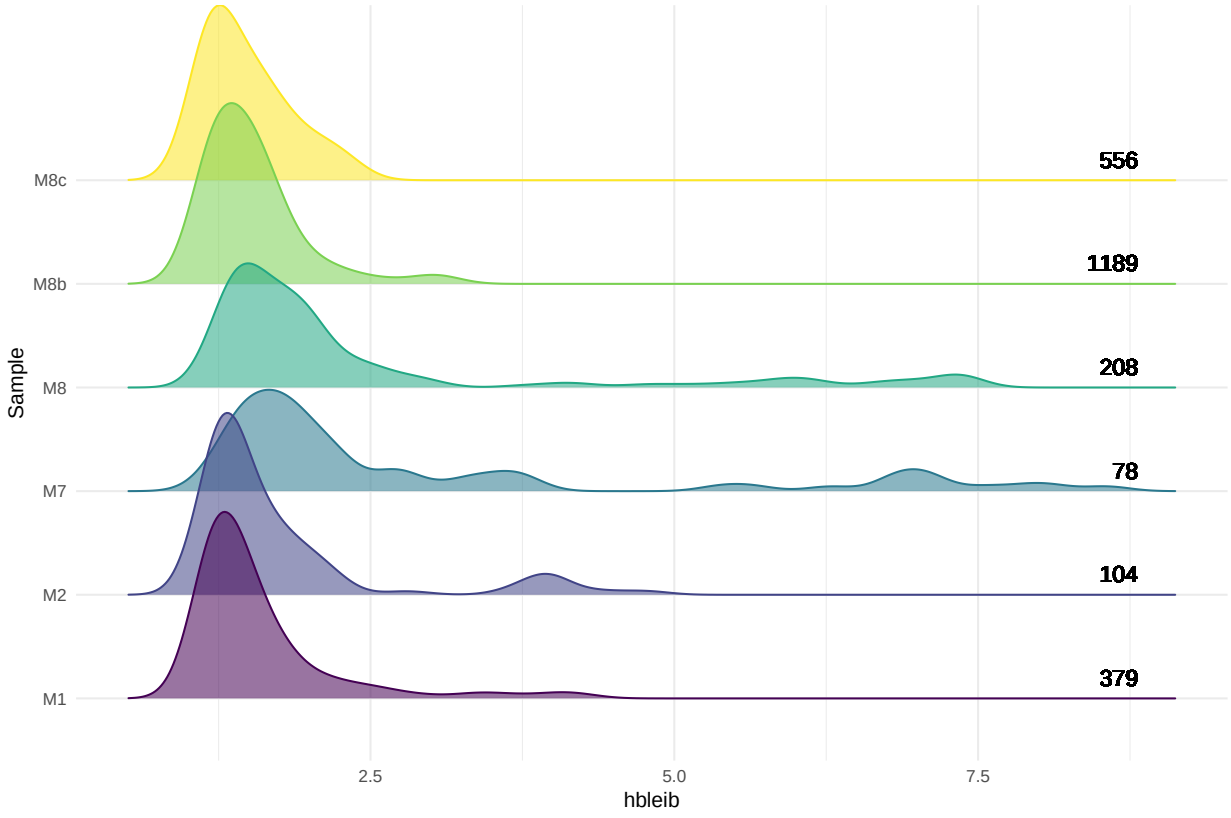

Figure 6.8.: Density plots for inverse staying probabilities hbleib by sample for survey year 2024.

6.1.3. IAB-BAMF-SOEP Survey of Refugees

Figure 6.9 displays the density plots for longitudinal weights for each wave of the IAB-BAMF-SOEP Survey of Refugees and Figure 6.10 displays sample specific density plots of the longitudinal weights for survey year 2024.

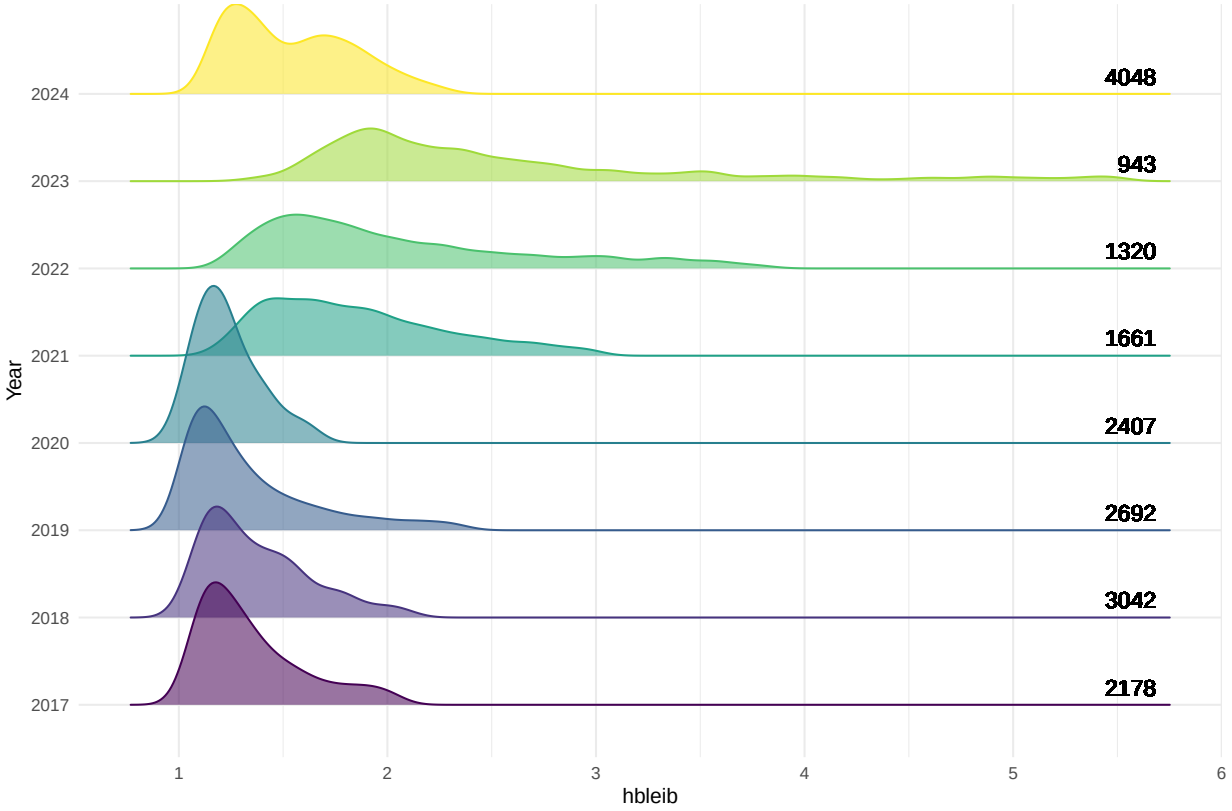

Figure 6.9.: Density plots for inverse staying probabilities hbleib by survey year.

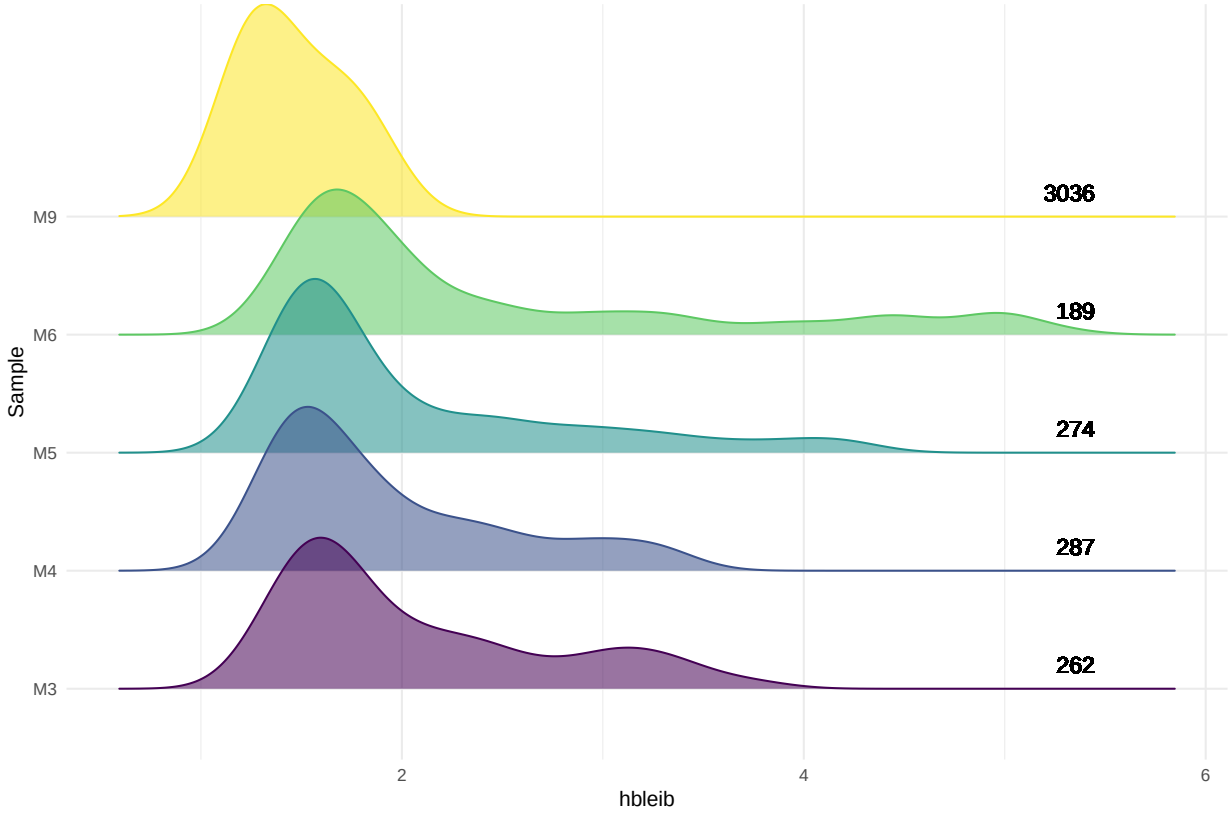

Figure 6.10.: Density plots for inverse staying probabilities hbleib by sample for survey year 2024.

6.2. Household-level weights

6.2.1. SOEP-Core

We show density plots of the derived cross-sectional weights at the household-level (`hhrf`) for SOEP-Core by survey year (starting with Figure 6.11) and by sample for survey year 2024 (Figure 6.16).

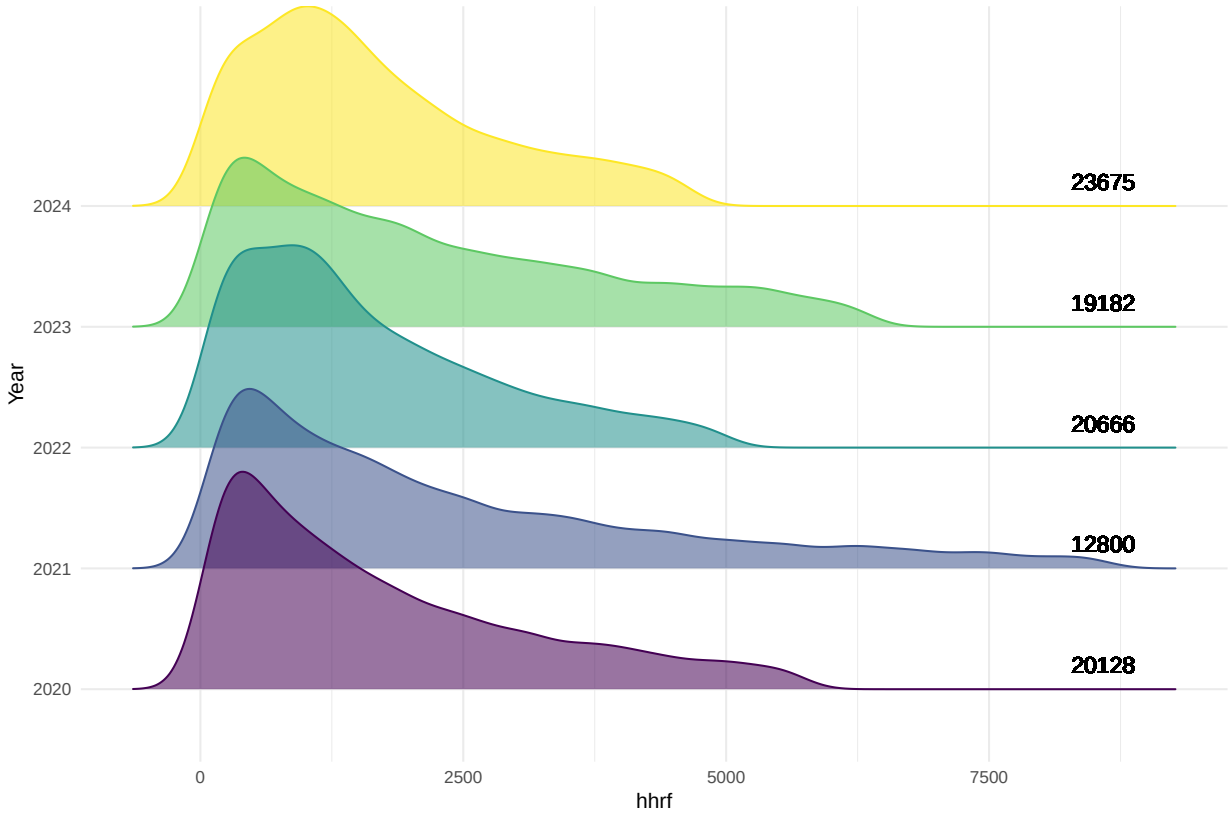

Figure 6.11.: Density plots for household level weights hhrf by survey year (years 2020-2024).

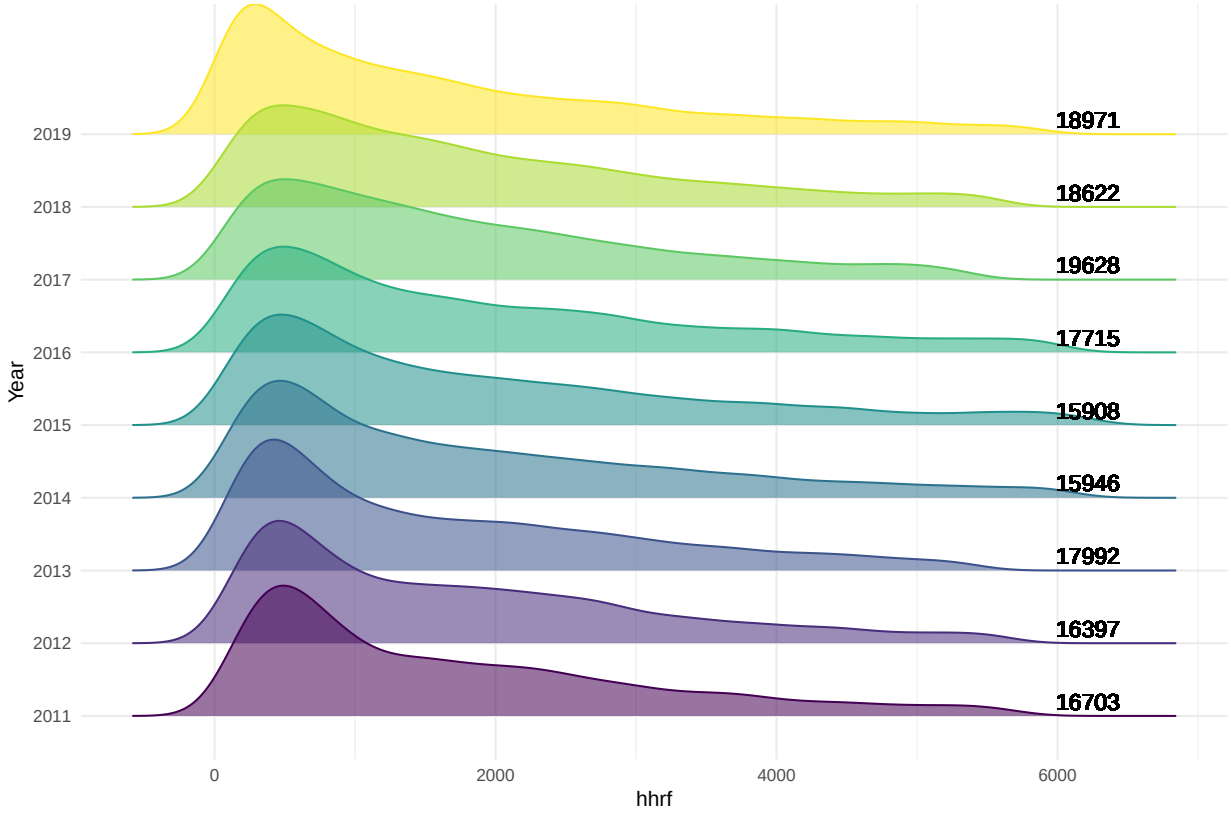

Figure 6.12.: Density plots for household level weights hhrf by survey year (years 2011-2020).

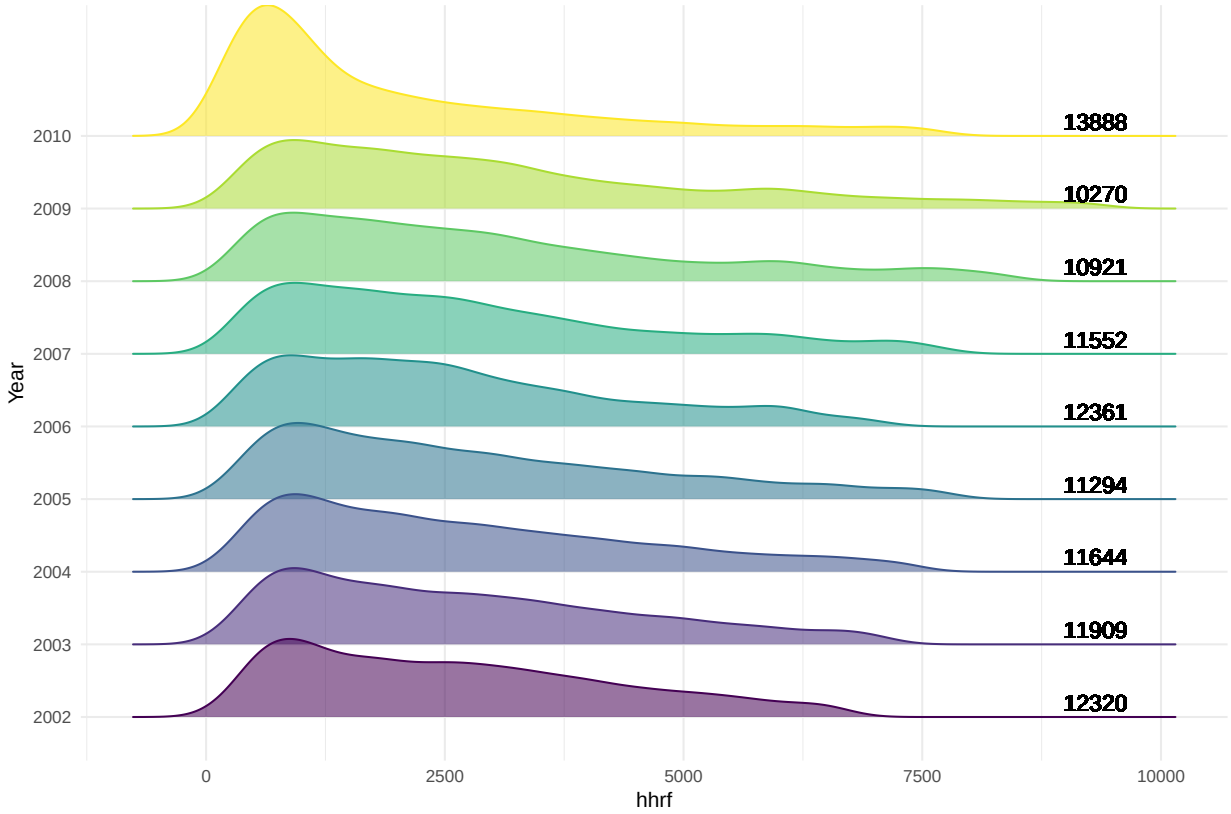

Figure 6.13.: Density plots for household level weights hhrf by survey year (years 2002-2011).

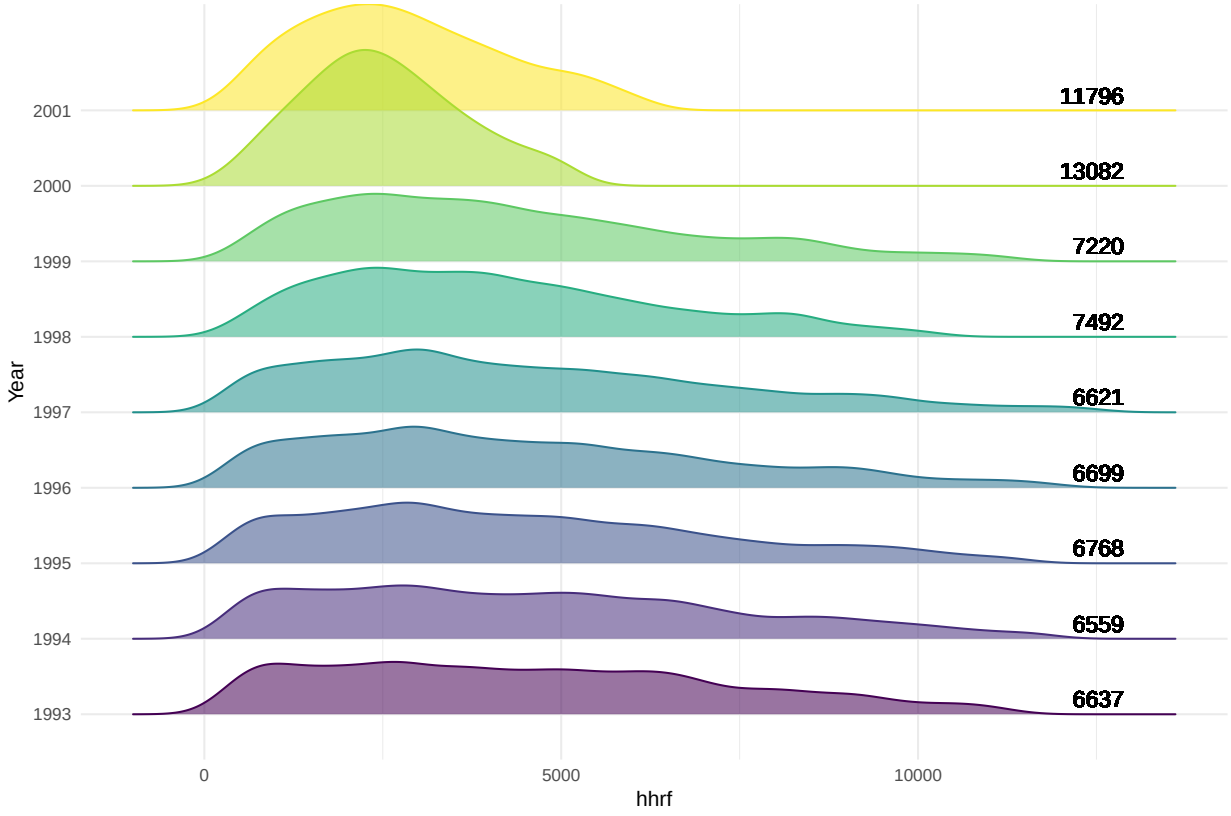

Figure 6.14.: Density plots for household level weights hhrf by survey year (years 1993-2002).

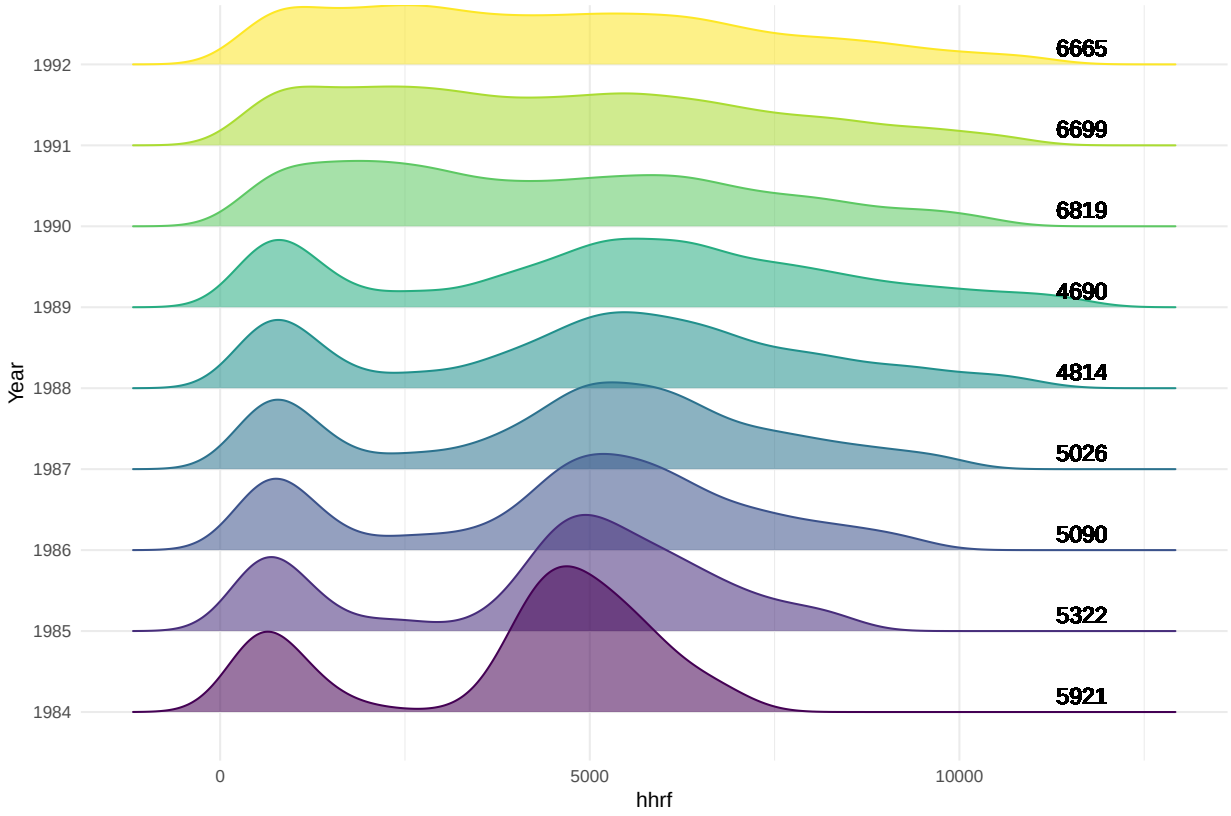

Figure 6.15.: Density plots for household level weights hhrf by survey year (years 1984-1993).

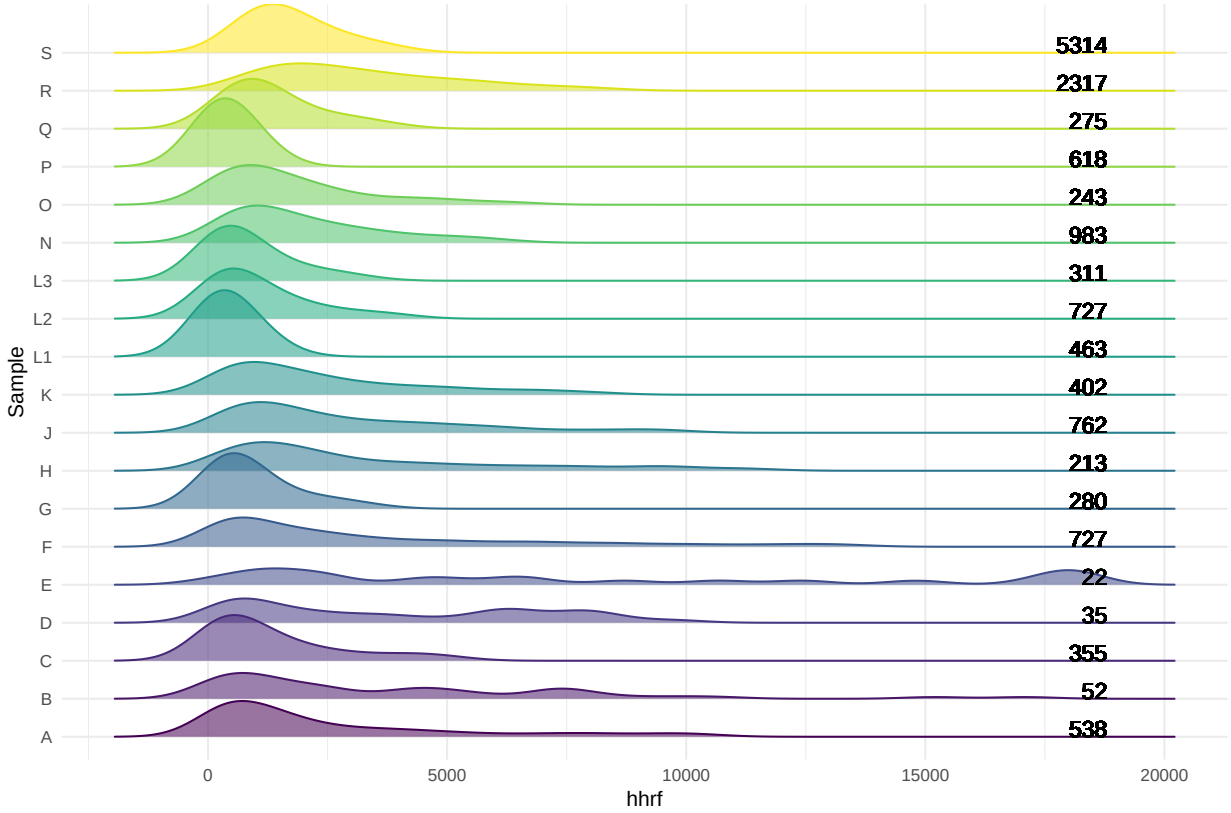

Figure 6.16.: Density plots for household level weights hhrf by sample for survey year 2024.

6.2.2. IAB-SOEP Migration Sample

We show density plots of the derived cross-sectional weights at the household-level (`hhrf`) for the IAB-SOEP Migration Sample by survey year (Figure 6.17) and sample for survey year 2024 (Figure 6.18).

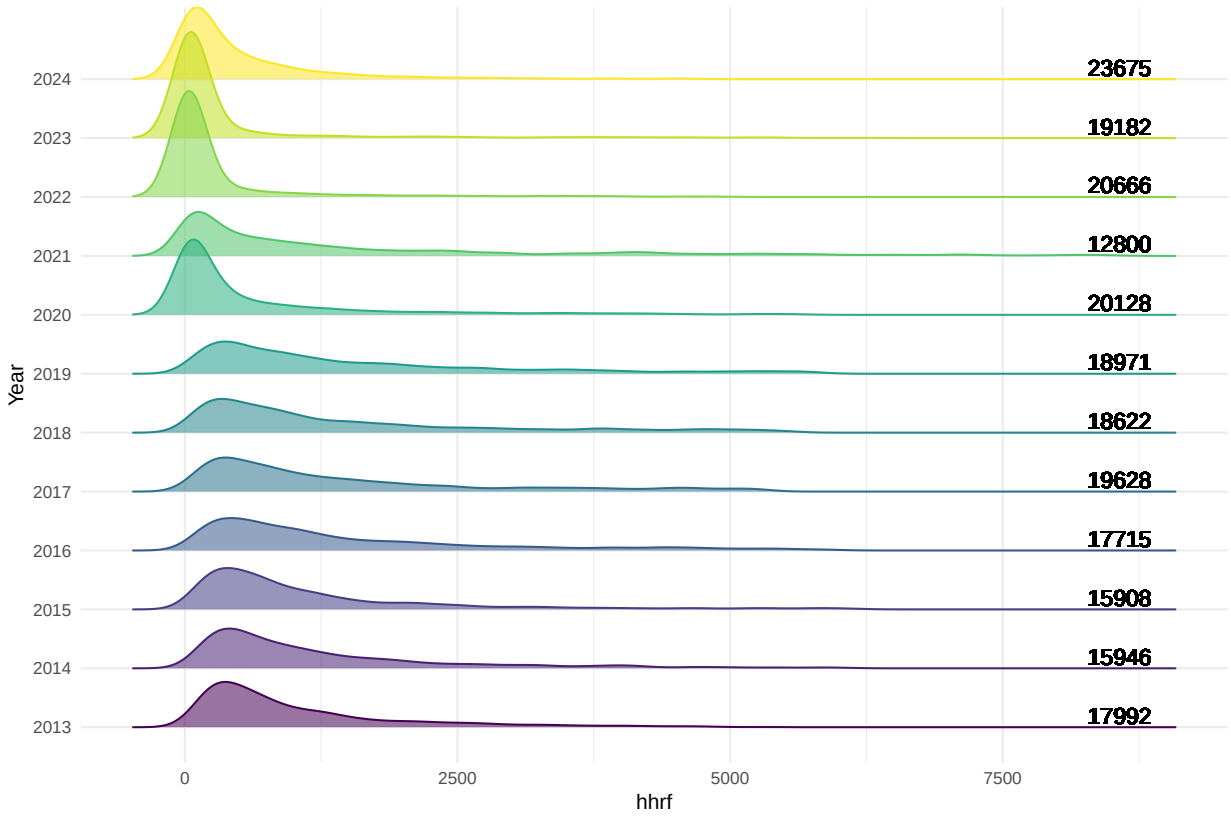

Figure 6.17.: Density plots for household level weights hhrf by survey year.

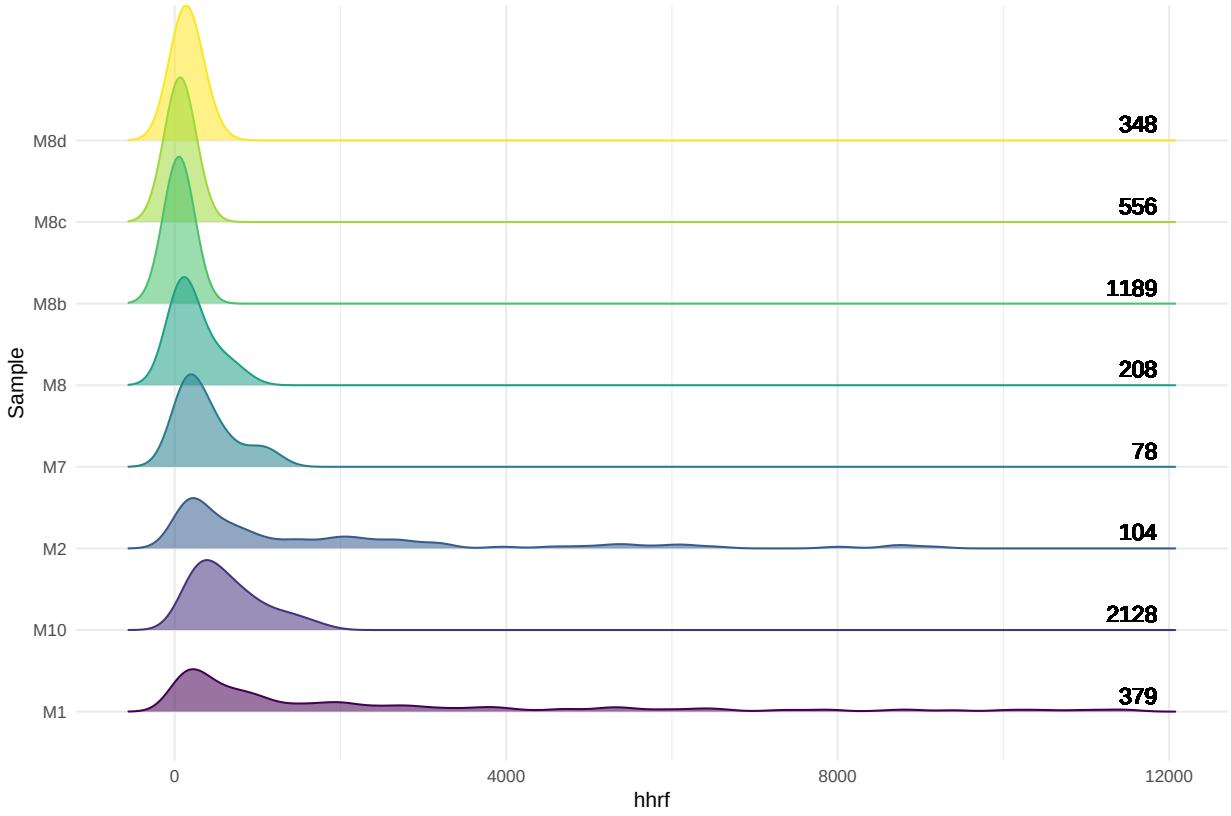

Figure 6.18.: Density plots for household level weights hhrf by sample for survey year 2024.

6.2.3. IAB-BAMF-SOEP Survey of Refugees

We show density plots of the derived cross-sectional weights at the household-level (`hhrf`) for the IAB-BAMF-SOEP Survey of Refugees by survey year (Figure 6.19) and by sample for survey year 2024 (Figure 6.20).

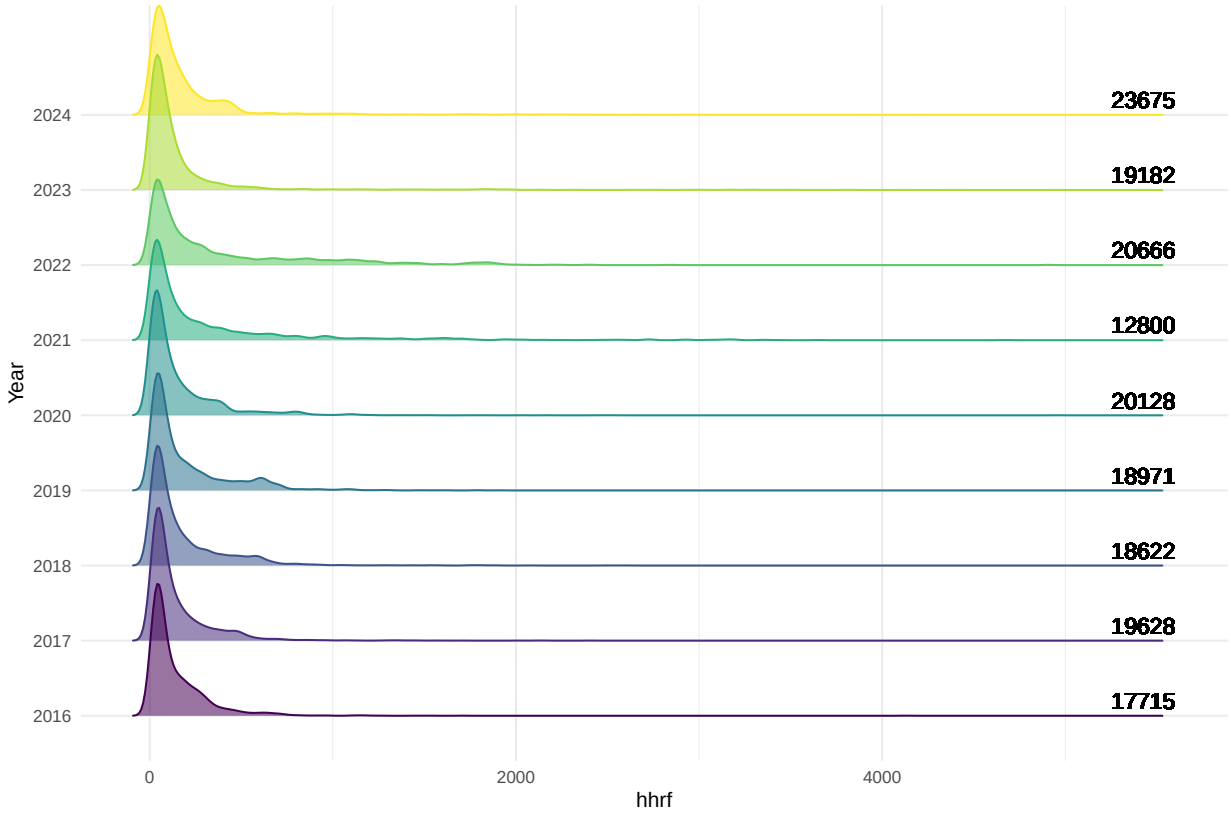

Figure 6.19.: Density plots for household level weights hhrf by survey year.

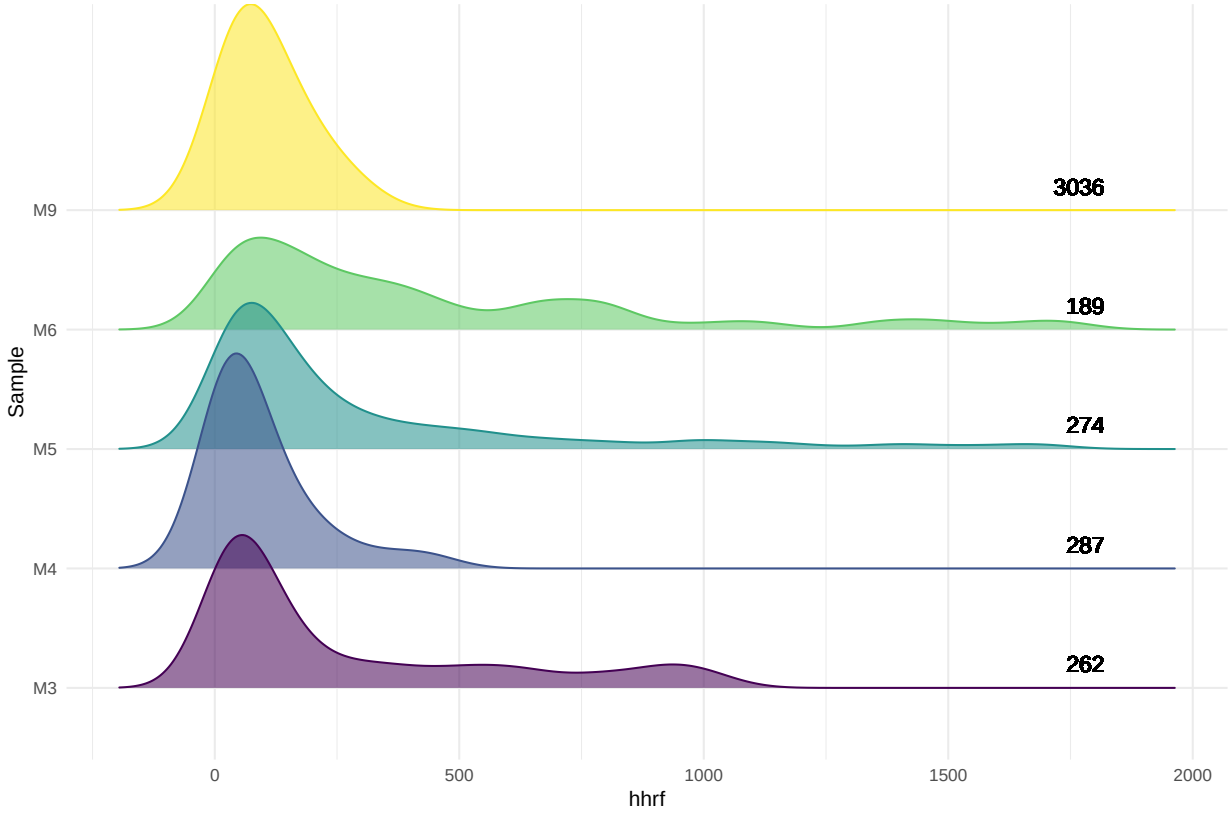

Figure 6.20.: Density plots for household level weights hhrf by sample for survey year 2024.

6.3. Person-level weights

6.3.1. SOEP-Core

We show density plots of the derived cross-sectional weights at the person-level (`phrf`) for SOEP-Core by survey year (starting with Figure 6.21) and by sample for survey year 2024 (Figure 6.26).

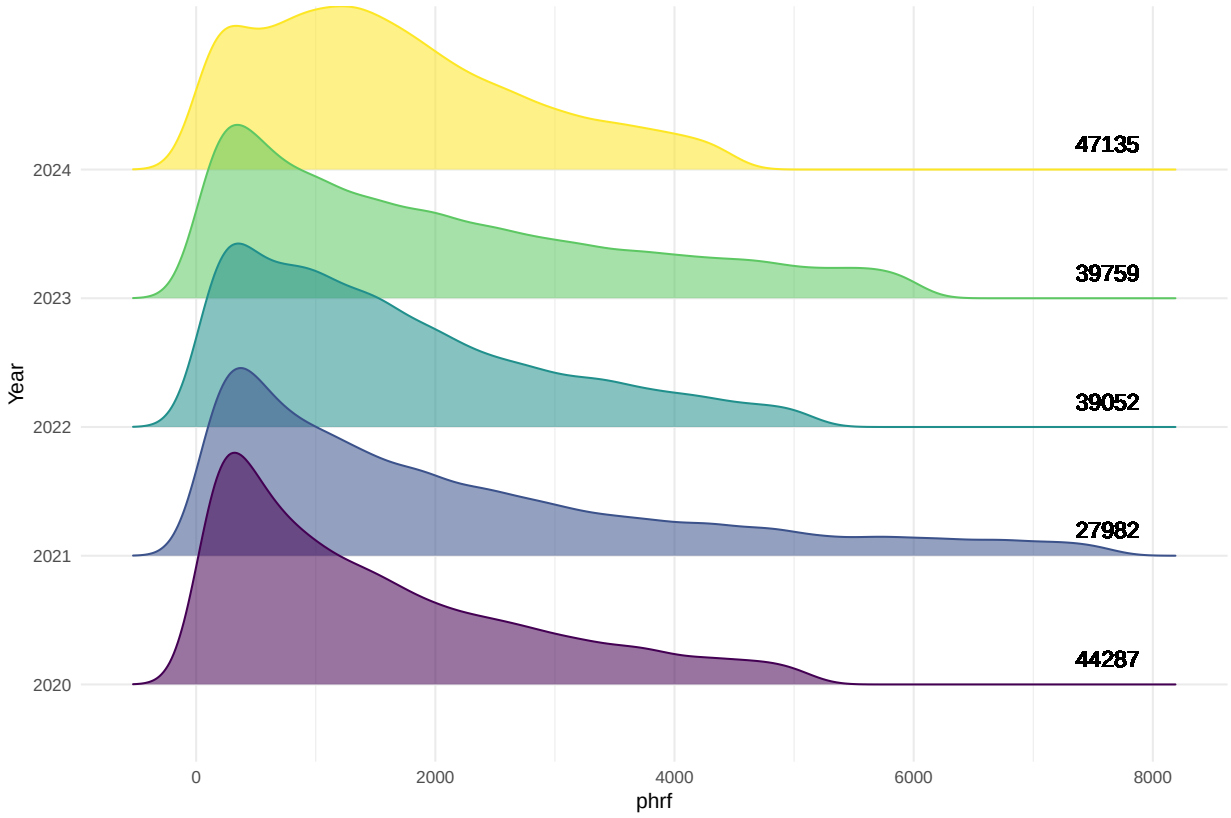

Figure 6.21.: Density plots for person level weights hhrf by survey year (years 2020-2024).

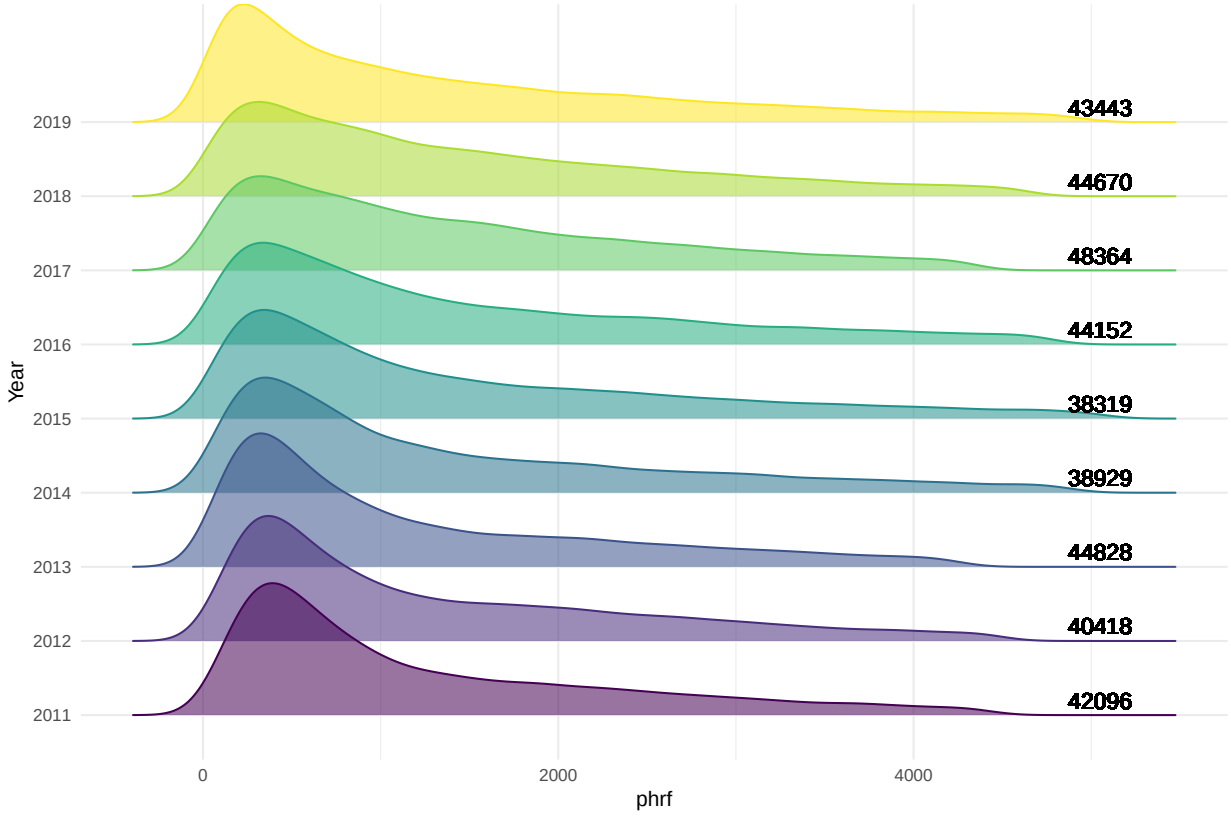

Figure 6.22.: Density plots for person level weights hhrf by survey year (years 2011-2020).

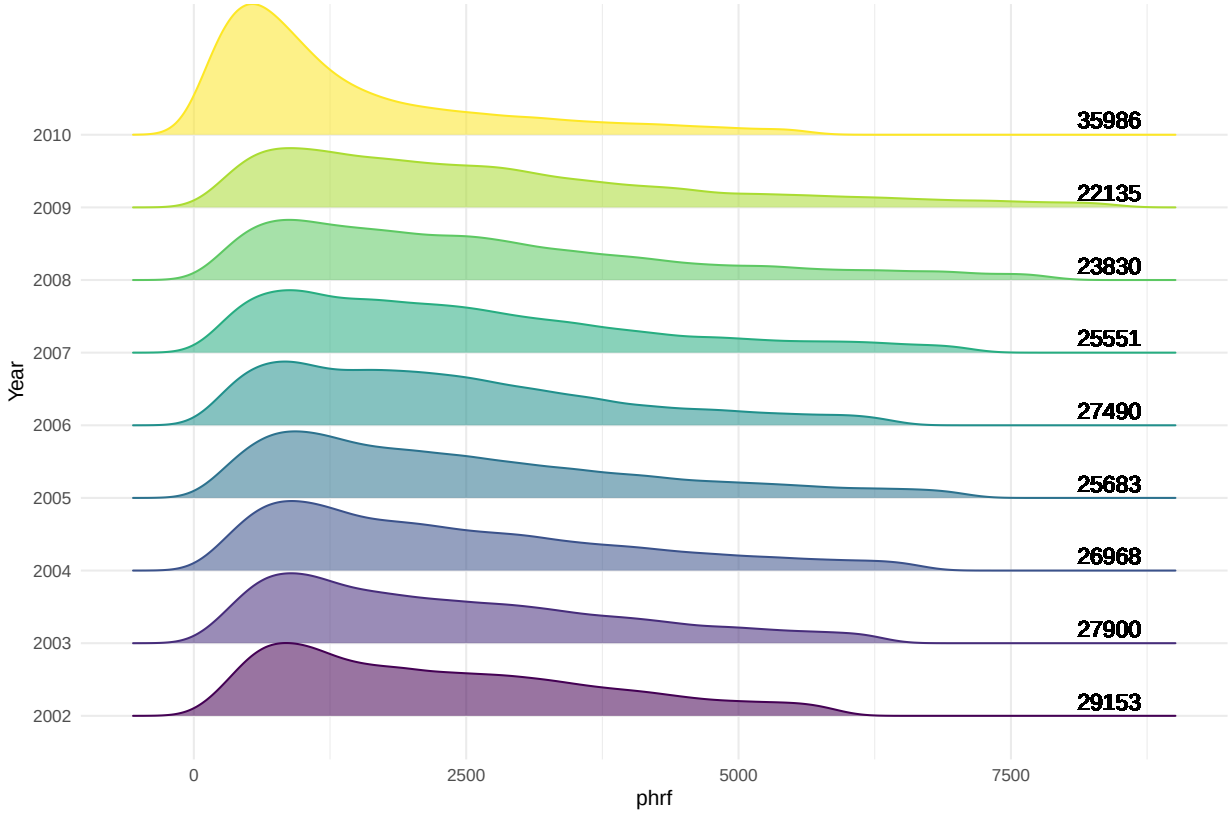

Figure 6.23.: Density plots for person level weights hhrf by survey year (years 2002-2011).

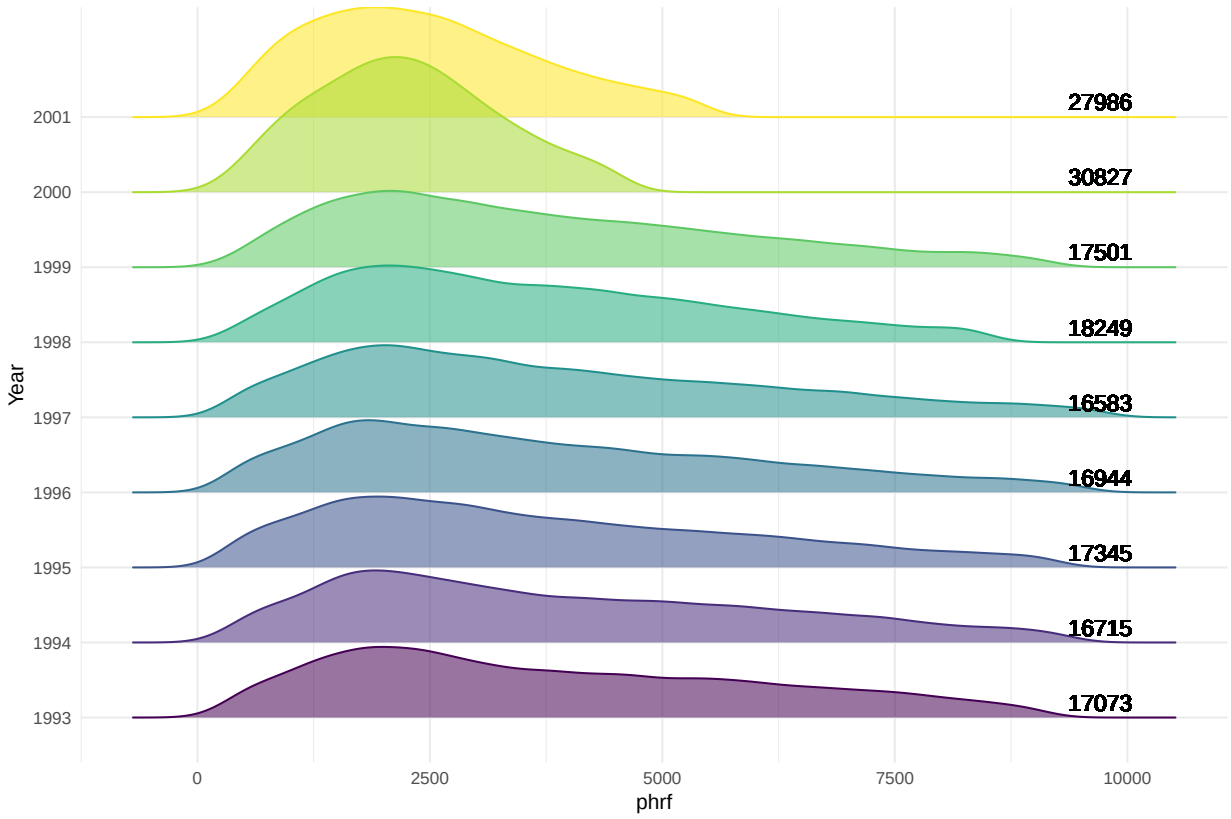

Figure 6.24.: Density plots for person level weights hhrf by survey year (years 1993-2002).

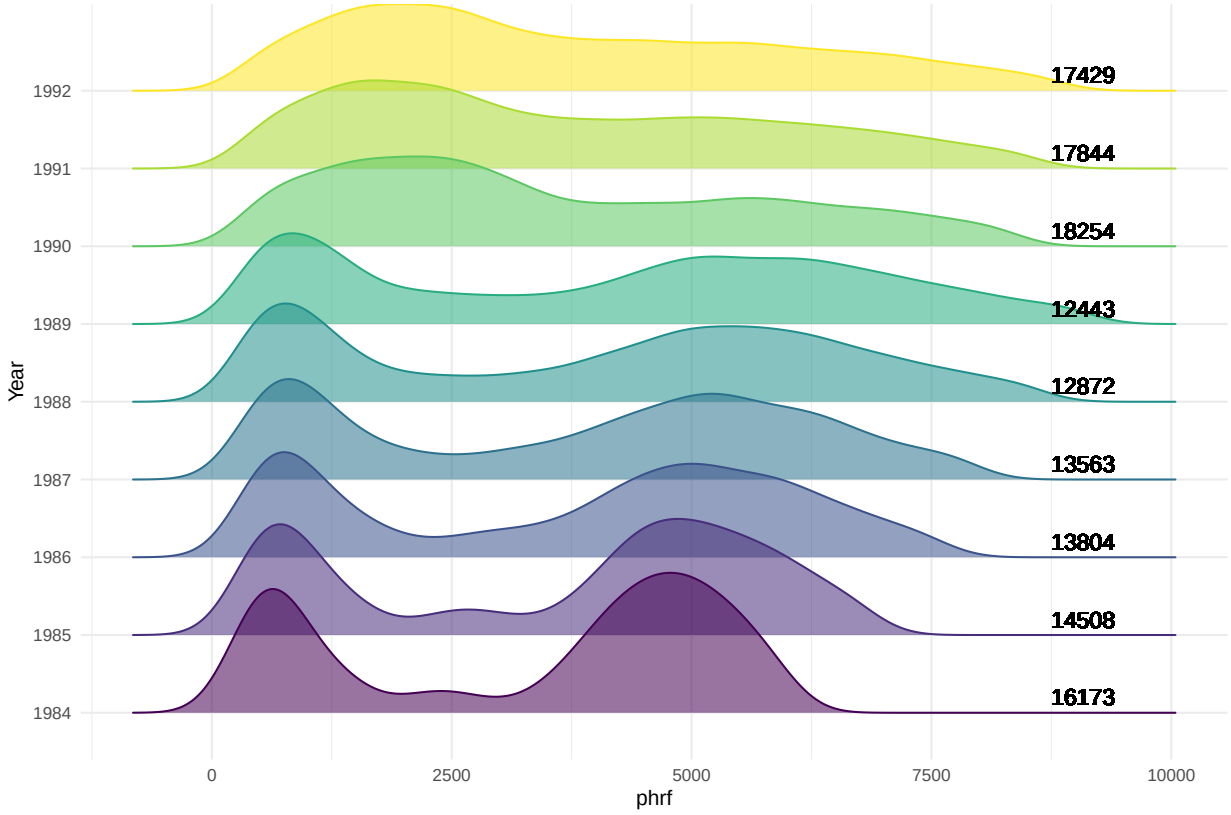

Figure 6.25.: Density plots for person level weights hhrf by survey year (years 1984-1993).

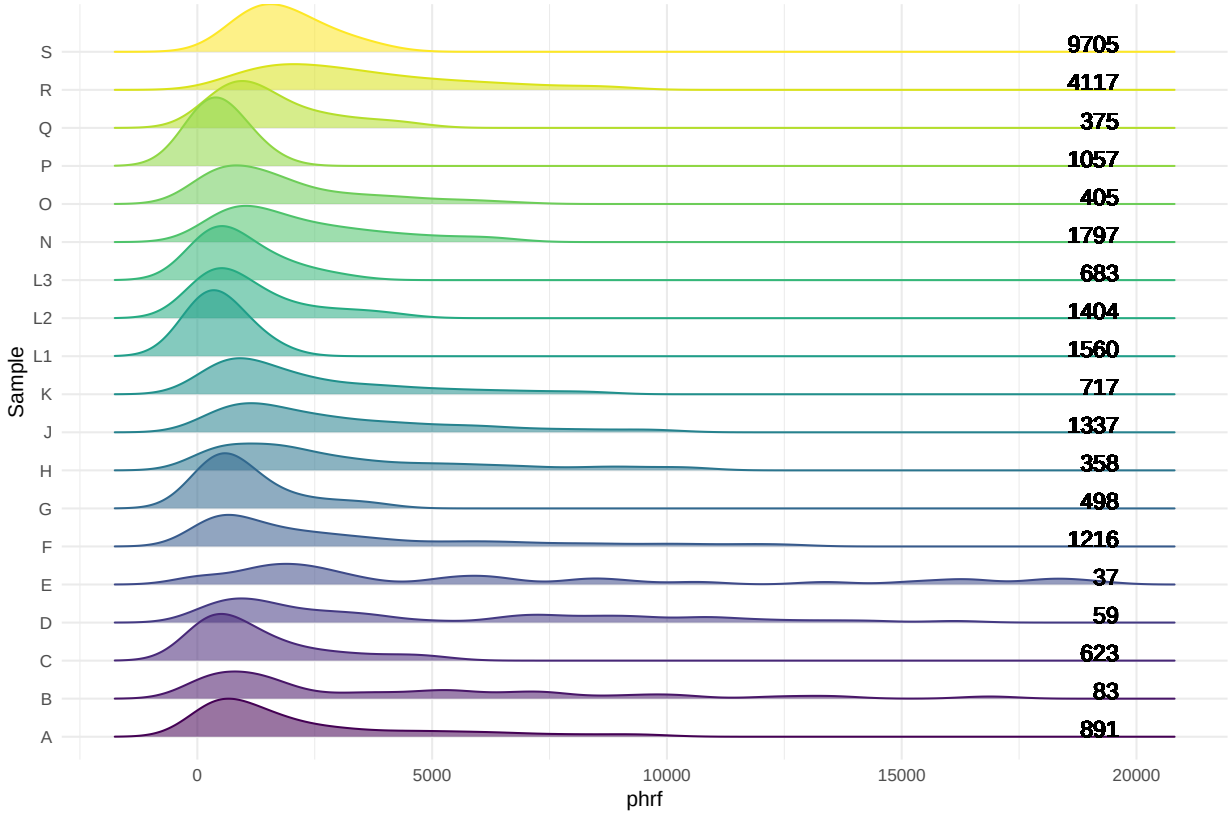

Figure 6.26.: Density plots for person level weights phrf by sample for survey year 2024.

6.3.2. IAB-SOEP Migration Sample

We show density plots of the derived cross-sectional weights at the person-level (`phrf`) for the IAB-SOEP Migration Sample by survey year (Figure 6.27) and by sample for survey year 2024 (Figure 6.28).

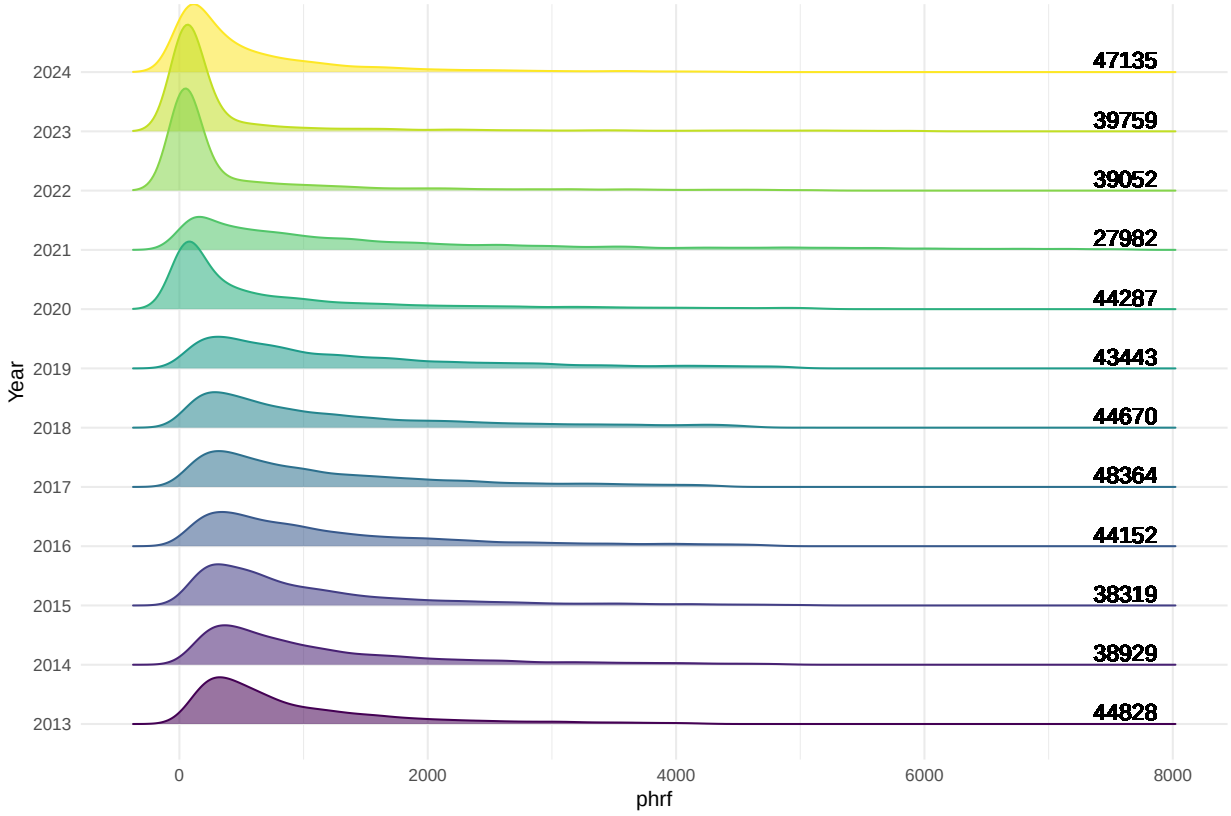

Figure 6.27.: Density plots for person level weights phrf by survey year.

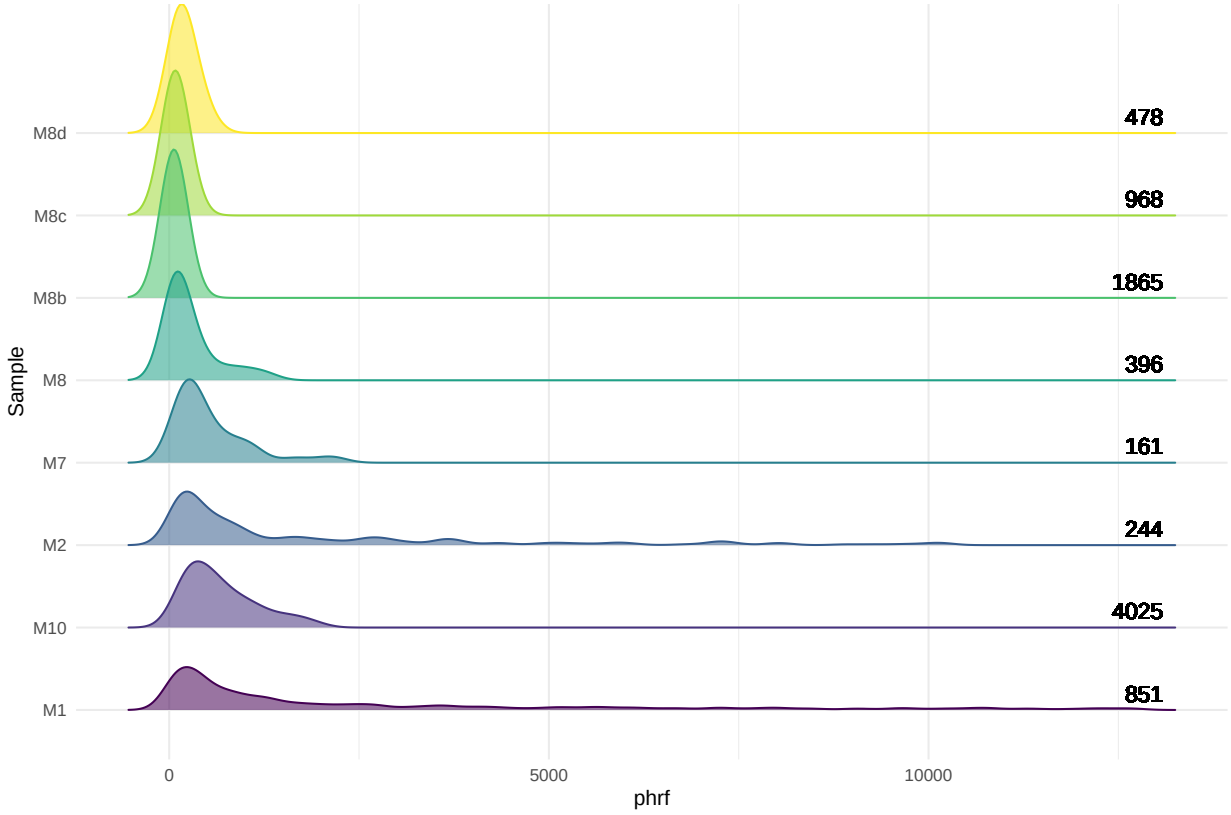

Figure 6.28.: Density plots for person level weights phrf by sample for survey year 2024.

6.3.3. IAB-BAMF-SOEP Survey of Refugees

We show density plots of the derived cross-sectional weights at the person-level (`phrf`) for the IAB-BAMF-SOEP Survey of Refugees by survey year (Figure 6.29) and by sample for survey year 2024 (Figure 6.30).

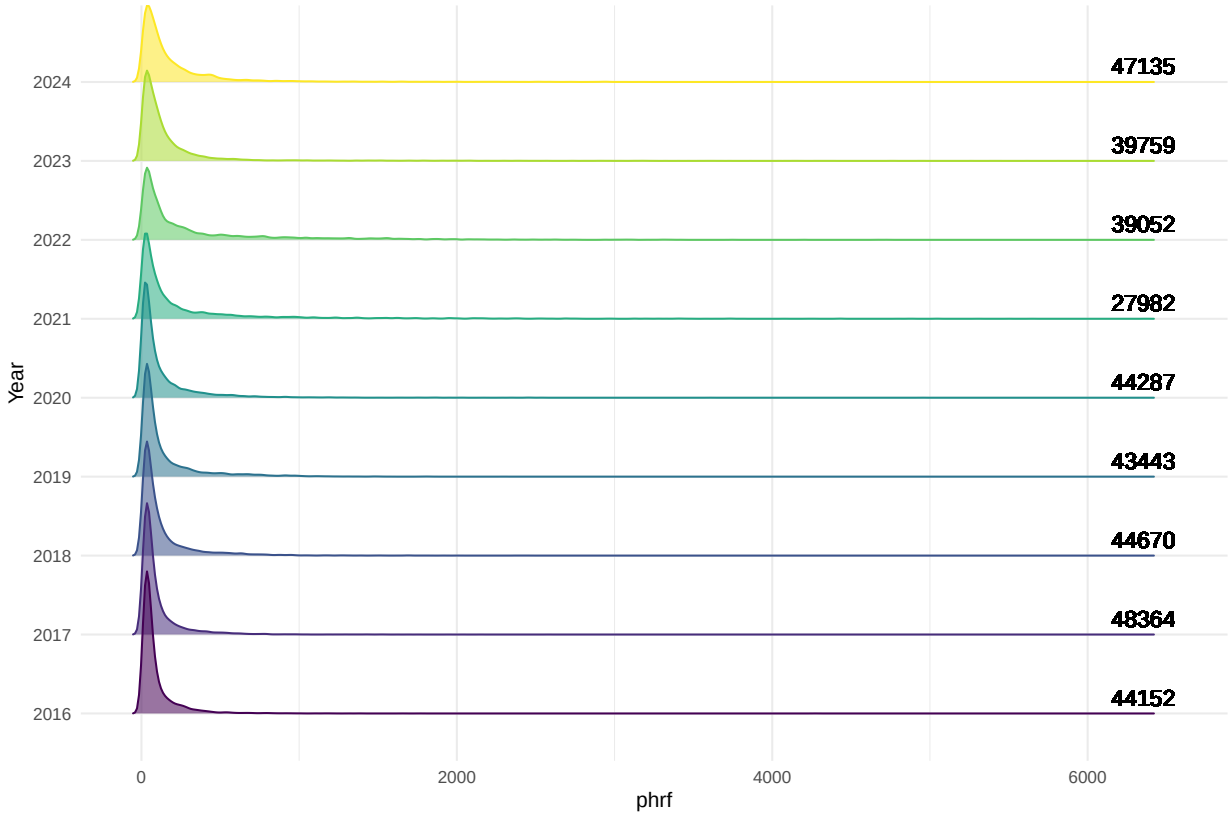

Figure 6.29.: Density plots for person level weights phrf by survey year.

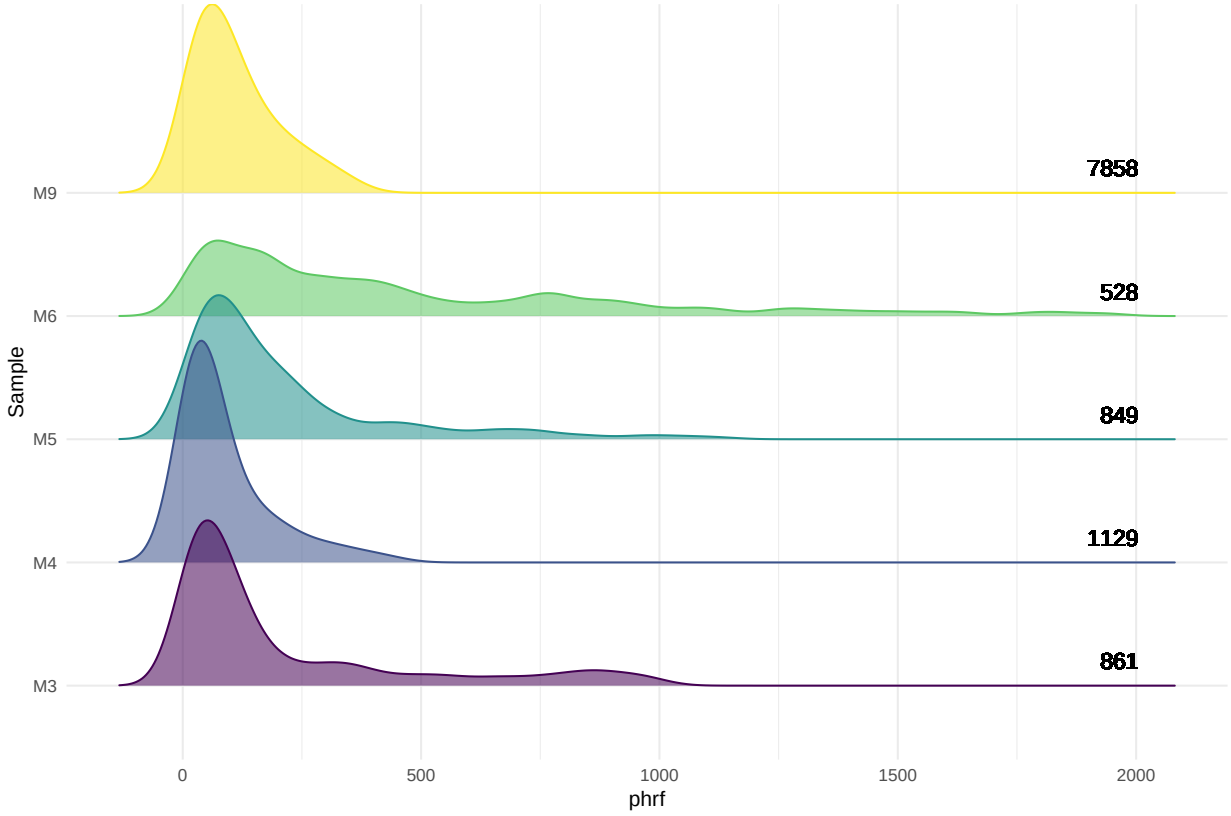

Figure 6.30.: Density plots for person level weights phrf by sample for survey year 2024.

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A. Appendix A

A.1. Survey Years and Waves

Table A.1.: Overview of survey years, corresponding wave names, samples entering the SOEP and the annual documentation of panel attrition.

Year	Wave	Samples	Documentation of attrition
1984	A	A, B	
1985	B		
1986	C		
1987	D		
1988	E		
1989	F		
1990	G	C	
1991	H		
1992	I		
1993	J		
1994	K	D	
1995	L		Pannenberg and Rendtel (1996)
1996	M		Pannenberg (1997)
1997	N		Pannenberg (1998)
1998	O	E	Pannenberg (2000)
1999	P		
2000	Q	F	Pannenberg (2001)
2001	R		Spieß and Pannenberg (2002)
2002	S	G	Spieß and Pannenberg (2003)
2003	T		Spieß and Kroh (2004)
2004	U		Kroh and Spieß (2005)
2005	V		Kroh and Spieß (2006)
2006	W	H	Spieß and Kroh (2008)
2007	X		Kroh and Spieß (2008)
2008	Y		Kroh (2009)
2009	Z	I	Kroh (2010)
2010	BA	L1, L2	Kroh (2011)
2011	BB	J, L3	Kroh (2013a)
2012	BC	K	Kroh (2013b)
2013	BD	M1	Kroh and Siegers (2014)
2014	BE		Kroh, Kühne, and Siegers (2015)
2015	BF	M2	Kroh, Kühne, and Siegers (2017)
2016	BG	M3, M4	Kroh et al. (2018)
2017	BH	M5, N	Siegers, Belcheva, and Silbermann (2019)
2018	BI	O	Siegers, Belcheva, and Silbermann (2020)
2019	BJ	P, Q	Siegers, Steinhauer, and Dührsen (2021)
2020	BK	M6, M7, M8	Siegers, Steinhauer, and Schütt (2022)
2021	BL		Siegers, Steinhauer, and Süttmann (2026a)

Year	Wave	Samples	Documentation of attrition
2022	BM	R, M8b	Siegers, Steinhauer, and Süttmann (2026b)
2023	BN	M8c, M9	Siegers, Steinhauer, and Süttmann (2026c)
2024	BO	S, M8d, M10	Siegers, Steinhauer, and Süttmann (2026d)

A.2. Model Output

A.2.1. SOEP-Core

Table A.2.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in SOEP-Core.

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
A to L3	Change of interviewer	-1.197	0.148	-1.419	0.104
A to L3	Change of interviewer X HH: No original sample member			0.715	0.127
A to L3	Change of interviewer X Residential area: low-status	-0.642	0.226		
A to L3	HH-head: permanent employment contract			0.435	0.085
A to L3	HH-head: preference for a political party			0.345	0.117
A to L3	HH-head: still with same partner			0.232	0.067
A to L3	HH-head: strong politcal interest			0.670	0.105
A to L3	HH-head: strong politcal interest X HH-head: permanent employment contract			-0.522	0.129
A to L3	HH: No original sample member			-0.622	0.088
A to L3	HH: new P to the SOEP in HH	-0.426	0.180	-0.638	0.174
A to L3	HH: no garden			0.670	0.097
A to L3	HH: no garden X HH-head: strong politcal interest			-0.541	0.140
A to L3	HH: size = 1 person	-0.813	0.109		
A to L3	Household income: 1. quartile			0.483	0.112
A to L3	Household income: 1. quartile X HH-head: still with same partner			-0.795	0.237
A to L3	Interview: HH four years without participation	-0.787	0.151	-1.497	0.108
A to L3	Interview: HH three years without participation	-0.692	0.160	-0.879	0.093
A to L3	Member of other organizations			0.326	0.069
A to L3	New HH in SOEP			-0.508	0.244
A to L3	New HH in SOEP X Partial unit nonresponse	-0.998	0.315		
A to L3	Not worried about immigration to Germany			0.290	0.084
A to L3	Not worried about immigration to Germany X Worried about immigration to Germany			-0.627	0.214
A to L3	Not worried about retirement benefits			0.180	0.071
A to L3	Partial unit nonresponse			-0.310	0.115
A to L3	Pensioner in HH	1.065	0.203		
A to L3	Single-family housing area			0.287	0.066
A to L3	Telephone number unknown	-1.985	0.189	-1.008	0.153

Table A.2.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in SOEP-Core. *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
A to L3	Telephone number unknown X Interview: HH four years without participation	1.324	0.330		
A to L3	Worried about immigration to Germany			0.186	0.079
A to L3	Worried about preserving peace			0.460	0.099
A to L3	Worried about preserving peace X HH-head: preference for a political party			-0.463	0.139
A to L3	Worried about preserving peace X Partial unit nonresponse			-0.312	0.144
NOPQ	Change of interviewer	-0.892	0.215	-1.176	0.152
NOPQ	Change of interviewer X HH-head: worried about health			-0.999	0.227
NOPQ	Change of interviewer X microm: family structure: single HH	-0.864	0.318		
NOPQ	Chronic illness: high blood pressure	0.966	0.278		
NOPQ	HH-head: permanent employment contract			0.427	0.113
NOPQ	HH-head: worried about health			0.647	0.160
NOPQ	HH: No original sample member	-0.747	0.211	-1.491	0.176
NOPQ	HH: No original sample member X Change of interviewer			0.836	0.185
NOPQ	HH: No original sample member X Member of other organizations			0.616	0.213
NOPQ	HH: No original sample member X New HH in SOEP	1.494	0.482		
NOPQ	HH: No original sample member X Partial unit nonresponse			0.671	0.219
NOPQ	HH: new P to the SOEP in HH			-0.377	0.149
NOPQ	HH: new P to the SOEP in HH X Residential area: low-status	-0.816	0.305		
NOPQ	HH: size = 1 person	-0.570	0.153		
NOPQ	Interview: HH four years without participation			-1.933	0.215
NOPQ	Interview: HH three years without participation			-0.670	0.155
NOPQ	New HH in SOEP	-4.241	0.415	-2.019	0.363
NOPQ	New HH in SOEP X Weekly working hours: above median	1.370	0.528		
NOPQ	Not worried about immigration to Germany			0.313	0.118
NOPQ	One P in HH: moved out last year	-1.118	0.505		
NOPQ	Partial unit nonresponse			-0.532	0.137
NOPQ	Pensioner in HH			0.729	0.158
NOPQ	Worried about preserving peace			0.312	0.107
NOPQ	microm: share of migrants from muslim countries: >=3%	-0.348	0.170		
R	Change of interviewer	-0.629	0.100	-0.537	0.068
R	Chronic illness: asthma			0.711	0.171
R	Chronic illness: high blood pressure			0.472	0.115
R	Chronic illness: joint disease			0.486	0.128
R	Employment status: other full-time			0.423	0.087

Table A.2.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in SOEP-Core. *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
R	Federal state: Saxony Anhalt	-0.686	0.196		
R	HH-head: BIG 5 agreeableness: high			0.281	0.088
R	HH-head: aged 25-34	-0.477	0.112		
R	HH-head: aged < 25	-0.687	0.149		
R	HH-head: breakup reason for moving out	-2.157	0.511		
R	HH-head: member of religious community	0.561	0.160	0.267	0.084
R	HH-head: strong politcal interest	0.565	0.168	0.443	0.086
R	HH: no garden			0.699	0.103
R	HH: no garden X Owner of house / apartment			-0.563	0.277
R	INKAR: share of employees in industrial sector: low	-0.375	0.117		
R	Member of other organizations			0.399	0.087
R	New HH in SOEP	-1.954	0.252		
R	Not worried about immigration to Germany			0.534	0.095
R	Owner of house / apartment			0.362	0.096
R	Partial unit nonresponse	-0.372	0.143		
R	Pensioner in HH			0.736	0.149
R	Telephone number unknown	-1.066	0.104		
R	Worried about preserving peace			0.272	0.086
R	Worried about social cohesion	0.674	0.174		

A.2.2. IAB-SOEP Migration Sample

Table A.3.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in the IAB-SOEP Migration Sample

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M1 / M2	Change of interviewer	-1.468	0.241		
M1 / M2	Change of interviewer X HH-head: non-German at birth			-1.237	0.325
M1 / M2	Donations for refugees			0.581	0.205
M1 / M2	HH-head: member of religious community			0.524	0.197
M1 / M2	HH-head: non-German at birth			0.665	0.255
M1 / M2	HH-head: permanent employment contract			0.411	0.193
M1 / M2	HH-head: still with same partner X INKAR: distance to the next elementary school: high	1.224	0.473		
M1 / M2	HH-head: worried about health	1.381	0.470		
M1 / M2	HH: No original sample member			-1.077	0.195
M1 / M2	INKAR: share of residents with elementary school nearby (<1km): low	-1.125	0.346		
M1 / M2	INKAR: share of unemployed aged 55+ years: high	-0.781	0.249		
M1 / M2	One P in HH: moved out last year	-2.061	0.910		
M1 / M2	Reading ability in German: well			0.800	0.217

Table A.3.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in the IAB-SOEP Migration Sample *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M1 / M2	Telephone number unknown	-2.941	0.307		
M1 / M2	Worried about preserving peace	0.753	0.268	0.600	0.195
M7	Change of interviewer	-1.119	0.303		
M7	Federal state: Lower Saxony / Bremen			2.037	0.584
M7	HH: new P to the SOEP in HH	-2.744	1.037		
M7	INKAR: Accessibility of long distance trains: low			-2.132	0.608
M7	INKAR: central location status: none			1.506	0.427
M7	INKAR: number of residents aged 50-64 years: high	-1.027	0.346		
M7	INKAR: number of students in comprehensive schools: low			1.383	0.379
M7	INKAR: share of apprentices (relative to employed): high	0.848	0.319		
M7	INKAR: share of children under 15 relative to working-age population: high	-0.589	0.263		
M7	Interview: HH four years without participation			-2.805	0.621
M7	Interview: HH three years without participation			-1.853	0.574
M7	Interview: late in the year			-1.874	0.536
M7	Meat consumption: at least weekly			1.581	0.440
M7	Number of missings finance questions in HH: high			1.936	0.525
M7	Residential area: low-status	-1.189	0.308		
M7	Restricted by health problems			1.969	0.543
M7	Voter participation: high	-1.029	0.316		
M7	microm: share of migrants from muslim countries: >=3%	-0.812	0.315		
M8	Change of interviewer X microm: fluctuation in area above average	-0.955	0.379		
M8	Donations for refugees			0.822	0.304
M8	Federal state: Berlin / Brandenburg			1.007	0.296
M8	Feeling sad: often	-1.291	0.406		
M8	HH-head: aged 25-34	-0.597	0.211		
M8	HH-head: member of religious community			0.704	0.288
M8	HH-head: stayed in hospital last year			2.558	1.096
M8	HH: No balcony or terrace			0.789	0.354
M8	HH: Not satisfied with family life			1.214	0.456
M8	HH: new P to the SOEP in HH	-1.186	0.330	-1.344	0.316
M8	INKAR: number of hospital beds per 1000 residents: low			0.921	0.310
M8	INKAR: number of residents aged 30-49 years: low	0.896	0.403		
M8	INKAR: share of mini jobs / employed: high	0.808	0.285		
M8	INKAR: share of natural area: high	0.799	0.265		
M8	INKAR: share of natural area: low	-0.993	0.285		

Table A.3.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in the IAB-SOEP Migration Sample *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M8	INKAR: share of natural area: low X HH-head: aged 25-34	1.243	0.417		
M8	Interview: HH four years without participation			-2.061	0.460
M8	Number of missings in HH: high	1.213	0.393		
M8	Single-family housing area	-0.800	0.274		
M8	Worried about economic development			1.081	0.427
M8	microm: above average share of families with children	-1.060	0.384		
M8	microm: family structure: single HH	-0.663	0.228		
M8b	Change of interviewer	1.949	0.252	-1.043	0.164
M8b	HH-head: member of religious community	0.663	0.243		
M8b	HH-head: member of religious community X Interview: late in the year	-1.108	0.327		
M8b	HH-head: non-German at birth	1.368	0.226	1.464	0.166
M8b	HH-head: non-German at birth X Change of interviewer	-1.308	0.303		
M8b	HH-head: worried about job security	0.333	0.164		
M8b	HH: no garage			0.665	0.187
M8b	INKAR: distance to the next elementary school: low			0.408	0.149
M8b	INKAR: number of new apartments per resident: low			-0.577	0.177
M8b	Interview: first contact at weekend	1.493	0.184		
M8b	Interview: first contact in the evening	2.969	0.262		
M8b	Interview: first contact in the evening X Change of interviewer	-2.427	0.415		
M8b	Interview: first contact in the morning	-0.463	0.129		
M8b	Interviewer: age group: born before 1957			-0.803	0.201
M8b	Interviewer: casmin 0			-2.112	0.594
M8b	Interviewer: casmin 1a, 1b, 1c			-1.000	0.204
M8b	New HH in SOEP	-3.141	0.774		
M8b	Owner of house / apartment			-1.660	0.479
M8c	At least one foreign born parent in HH			-1.749	0.593
M8c	Change of interviewer			-2.668	0.386
M8c	Federal state: Rhineland-Palatine / Saarland			-1.590	0.577
M8c	HH-head: aged 45-54	0.902	0.422		
M8c	HH-head: preference for a political party			1.514	0.640
M8c	HH-head: self-employed	-2.727	1.181		
M8c	HH: Not satisfied with family life	-0.407	0.183		
M8c	HH: no garden	0.429	0.175		
M8c	INKAR: number of elementary school students: high	0.523	0.244		
M8c	INKAR: share of fathers receiving parental benefits: low	0.534	0.255		
M8c	INKAR: share of votes for Bündnis 90/Die Grünen: low	0.641	0.306		
M8c	Interview: first contact at weekend	1.608	0.247		

Table A.3.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in the IAB-SOEP Migration Sample *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M8c	Interview: first contact in the evening	3.252	0.386		
M8c	Interview: first contact in the morning	-0.927	0.178		
M8c	Interview: high number of missings for P	-0.511	0.191		
M8c	Member of other organizations	0.839	0.316		
M8c	Partial unit nonresponse	-0.993	0.175		
M8c	Refugees are bad for economy			1.299	0.556
M8c	microm: expeditious milieu			1.109	0.448

A.2.3. IAB-BAMF-SOEP Refugee Studies

Table A.4.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in IAB-BAMF-SOEP Refugee Studies.

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M3 to M6	Area with many voters for Die Linke			-0.459	0.133
M3 to M6	Federal state: Bavaria	-0.621	0.235		
M3 to M6	HH-head: aged 25-34	-0.498	0.152		
M3 to M6	HH-head: aged 25-34 X INKAR: share of votes for FDP: low	0.753	0.330		
M3 to M6	HH-head: non-German at birth	0.913	0.208	0.733	0.122
M3 to M6	HH: new P to the SOEP in HH			-0.739	0.107
M3 to M6	HH: size = 1 person	-0.498	0.226		
M3 to M6	HH: size = 1 person X HH: Related HH same interviewer	-1.062	0.412		
M3 to M6	HH: size = 1 person X INKAR: share of long-time unemployed: high	0.725	0.297		
M3 to M6	HH: size = 1 person X microm: adaptive pragmatic milieu	-1.195	0.414		
M3 to M6	INKAR: Accessibility of airports: low X INKAR: total migration balance: positive	-0.867	0.331		
M3 to M6	INKAR: bandwidth availability: high			-0.417	0.119
M3 to M6	INKAR: number of students in comprehensive schools: low X HH: Related HH same interviewer	-1.152	0.442		
M3 to M6	INKAR: share of apprentices (relative to employed): high	-0.307	0.147		
M3 to M6	INKAR: share of votes for SPD: low	-0.534	0.237		
M3 to M6	INKAR: share of votes for SPD: low X HH-head: still with same partner	0.810	0.340		
M3 to M6	INKAR: total fertility rate: high			0.389	0.128
M3 to M6	INKAR: total fertility rate: high X HH: size = 1 person			-1.125	0.280
M3 to M6	Interview: HH four years without participation	-0.975	0.194	-1.072	0.138

Table A.4.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in IAB-BAMF-SOEP Refugee Studies. *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M3 to M6	Interview: HH three years without participation	-0.511	0.203	-0.498	0.123
M3 to M6	New HH in SOEP	-2.252	0.425		
M3 to M6	New HH in SOEP X HH-head: non-German at birth	-1.307	0.603		
M3 to M6	Not worried about retirement benefits			0.703	0.303
M3 to M6	Residential area: low-status			0.482	0.127
M3 to M6	State of health affects tiring tasks: not at all			1.041	0.235
M3 to M6	State of health affects tiring tasks: not at all X microm: share of foreigners: very high			-0.972	0.282
M3 to M6	Worried about preserving peace			0.643	0.325
M3 to M6	microm: family structure: single HH	-0.542	0.135		
M3 to M6	microm: share of Eastern Europeans > 15%			0.643	0.180
M3 to M6	microm: share of Eastern Europeans > 15% X Residential area: low-status			-0.986	0.215
M3 to M6	microm: share of foreigners: very high			0.510	0.109
M9ROW	Change of interviewer	-0.764	0.236		
M9ROW	Feeling energetic: often	0.394	0.176		
M9ROW	HH-head: aged < 25			-0.494	0.153
M9ROW	HH-head: aged < 25 X Interview: missing at least one financial question			1.108	0.385
M9ROW	HH-head: employed	-1.918	0.570		
M9ROW	HH-head: intention of finding a job	-0.675	0.182		
M9ROW	HH-head: legally handicapped, reduced employment	-3.490	1.006		
M9ROW	HH: Not satisfied with family life			0.363	0.107
M9ROW	HH: Not satisfied with family life X INKAR: ratio employment rates of women / men: high			-0.797	0.244
M9ROW	HH: Related HH same interviewer			1.402	0.509
M9ROW	HH: receives unemployment benefits			0.212	0.096
M9ROW	HH: size = 1 person	-0.609	0.176		
M9ROW	INKAR: number of residents aged 25-29 years: low	-0.725	0.197		
M9ROW	INKAR: number of students in comprehensive schools: high	-0.483	0.191		
M9ROW	INKAR: ratio employment rates of women / men: high			0.361	0.157
M9ROW	INKAR: share of employees in industrial sector: low			0.479	0.149
M9ROW	INKAR: share of employees in industrial sector: low X Interview: high number of missings for P			-0.589	0.221
M9ROW	INKAR: share of forest area: low X Interview: missing at least one financial question			-0.659	0.268
M9ROW	INKAR: share of mini jobs / employed: high X HH-head: intention of finding a job			0.590	0.188

Table A.4.: Coefficients of the model estimating successful follow-ups (Contact) and re-interviewing (Cooperation) in IAB-BAMF-SOEP Refugee Studies. *(continued)*

		Contact		Cooperation	
Samples	Variable	estimate	std.error	estimate	std.error
M9ROW	INKAR: share of natural area per resident: high	-0.748	0.210		
M9ROW	INKAR: share of residents with public transport nearby (<1km): high X INKAR: share of residents with supermarket nearby (<1km): high			-0.738	0.260
M9ROW	INKAR: share of unemployment benefit recipients: low	-0.662	0.215		
M9ROW	INKAR: share of votes for CDU/CSU: high	0.727	0.236		
M9ROW	Partial unit nonresponse			-0.429	0.099
M9ROW	microm: area with high-rise buildings	-0.496	0.209		
M9ROW	microm: conservative milieu	-0.924	0.339	0.804	0.304
M9ROW	microm: conservative milieu X HH: receives unemployment benefits			-1.093	0.519
M9ROW	microm: family structure: single HH	-0.443	0.188		
M9UKR	Change of interviewer			-0.861	0.126
M9UKR	HH-head: college / university degree			0.379	0.114
M9UKR	HH-head: intention of finding a job			0.326	0.117
M9UKR	HH: living space: lower tercile X Number of missings finance questions in HH: high			0.849	0.321
M9UKR	INKAR: Municipal tax revenue in EUR per resident: high X Interview: high number of missings for P			-1.094	0.316
M9UKR	INKAR: share of employees commuting > 300km: low			-0.388	0.157
M9UKR	INKAR: share of residential area: low			0.543	0.139
M9UKR	INKAR: share of younger unemployed: high X INKAR: number of students in comprehensive schools: low			1.371	0.419
M9UKR	INKAR: total migration balance: positive X HH-head: aged < 25			-1.196	0.414
M9UKR	New HH in SOEP			-0.940	0.388
M9UKR	Number of missings finance questions in HH: high			-0.484	0.166
M9UKR	Partial unit nonresponse			-0.607	0.175
M9UKR	Partial unit nonresponse X HH: Not satisfied with family life			0.952	0.316
M9UKR	Partial unit nonresponse X INKAR: Accessibility of airports: low			-1.086	0.328

B. Appendix B

B.1. R Session Information

```
##  setting  value
##  version  R version 4.5.3 (2026-03-11)
##  os       Debian GNU/Linux 13 (trixie)
##  system   x86_64, linux-gnu
##  ui       X11
##  language
##  collate  de_DE.UTF-8
##  ctype    de_DE.UTF-8
##  tz       Europe/Berlin
##  date     2026-03-27
##  pandoc   3.6.3 @ /usr/lib/rstudio/resources/app/bin/quarto/bin/tools/x86_64/ (via rmarkdow
##  quarto   1.8.25 @ /usr/lib/rstudio/resources/app/bin/quarto/bin/quarto
```

```
## # A tibble: 26 x 4
##    package     loadedversion date       source
##    <chr>       <chr>         <chr>      <chr>
##  1 bookdown    0.46          2025-12-05 CRAN (R 4.5.2)
##  2 dplyr       1.2.0         2026-02-03 CRAN (R 4.5.2)
##  3 forcats     1.0.1         2025-09-25 CRAN (R 4.5.1)
##  4 ggplot2     4.0.2         2026-02-03 CRAN (R 4.5.2)
##  5 ggridges    0.5.7         2025-08-27 CRAN (R 4.5.1)
##  6 gitlabr     2.1.0         2024-05-16 CRAN (R 4.5.1)
##  7 glinternet  1.0.12        2021-09-03 CRAN (R 4.5.2)
##  8 here        1.0.2         2025-09-15 CRAN (R 4.5.1)
##  9 janitor     2.2.1         2024-12-22 CRAN (R 4.5.1)
## 10 kableExtra  1.4.0         2024-01-24 CRAN (R 4.5.1)
## 11 knitr       1.51          2025-12-20 CRAN (R 4.5.2)
## 12 labelled    2.16.0        2025-10-22 CRAN (R 4.5.2)
## 13 lubridate   1.9.5         2026-02-04 CRAN (R 4.5.2)
## 14 pacman      0.5.1         2019-03-11 CRAN (R 4.5.1)
## 15 pander      0.6.6         2025-03-01 CRAN (R 4.5.2)
## 16 purrr       1.2.1         2026-01-09 CRAN (R 4.5.2)
## 17 readr       2.2.0         2026-02-19 CRAN (R 4.5.2)
## 18 sessioninfo 1.2.3         2025-02-05 CRAN (R 4.5.2)
## 19 SOEPhelp    0.40.0        2025-11-14 local
## 20 stringr     1.6.0         2025-11-04 CRAN (R 4.5.2)
## 21 tibble      3.3.1         2026-01-11 CRAN (R 4.5.2)
## 22 tidyr       1.3.2         2025-12-19 CRAN (R 4.5.2)
## 23 tidyverse   2.0.0         2023-02-22 CRAN (R 4.5.1)
## 24 todor       0.1.2         2021-05-24 CRAN (R 4.5.1)
## 25 viridis     0.6.5         2024-01-29 CRAN (R 4.5.2)
## 26 viridisLite 0.4.3         2026-02-04 CRAN (R 4.5.2)
```

B.2. R-Packages

Attached packages loaded in the process of creating this report are: bookdown (Xie (2025a)), dplyr (Wickham, François, et al. (2026)), forcats (Wickham (2025a)), ggplot2 (Wickham, Chang, et al. (2026)), ggridges (Wilke (2025)), gitlabr (Lewandowski and Rochette (2024)), glinternet (Lim and Hastie (2021)), here (Müller (2025)), janitor (Firke (2024)), kableExtra (Zhu (2024)), knitr (Xie (2025b)), labelled (Larmarange (2025)), lubridate (Spinu, Grolemund, and Wickham (2026)), pacman (Rinker and Kurkiewicz (2019)), pander (Daróczi and Tsegelskyi (2025)), purrr (Wickham and Henry (2026)), readr (Wickham, Hester, and Bryan (2026)), sessioninfo (Wickham et al. (2025)), SOEPhelp (Steinhauer (2025)), stringr (Wickham (2025b)), tibble (Müller and Wickham (2026)), tidyr (Wickham, Vaughan, and Girlich (2025)), tidyverse (Wickham (2023)), todor (Krzemiński (2021)), viridis (Garnier (2024)), viridisLite (Garnier (2026))