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SOEP 2014 – Documentation on Biography and Life History Data for SOEP v31 and v31.1

Jan Goebel (ed.)



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Editors: Dr. Jan Goebel, DIW Berlin Prof. Dr. Martin Kroh, DIW Berlin and Humboldt Universität Berlin Prof. Dr. Carsten Schröder, DIW Berlin and Freie Universität Berlin Prof. Dr. Jürgen Schupp, DIW Berlin and Freie Universität Berlin

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SOEP 2014 – Documentation on Biography and Life History Data for SOEP v31 and v31.1

Jan Goebel (ed.)

The files described in this documentation are part of the collections, which are released with doi: 10.5684/soep.v31 and 10.5684/soep.v31.1

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1 General Introduction and Overview of Available Datasets

by Jan Goebel

By compiling a comprehensive set of questions on the individual life history into userfriendly variables, the SOEP database provides users with a representative collection of biographical information for the entire German population.¹ This covers information on the individual career path since the age of 15, on marital status and childhood biography, the first job, social background and migration history. The function of these data is, on the one hand, to make important background information available for analyses (e.g. information on fertility as an explanatory variable when analyzing labor market supply of women), and, on the other hand, to support self-contained analyses (e.g. on occupational careers or intergenerational transmission of education).

In general, each respondent of the SOEP questionnaire (surveying age starts in the calendar year a person turns 17 years) will answer the biographical questions only once (retrospectively). In the beginning of the SOEP, this occurred within the framework of the first three waves (1984 to 1986). Due to the inevitable 'mortality rate' of the panel (refusal to participate, death, relocation abroad), this process unfortunately leads to missing biographical entries for persons who did not participate in all three waves. Because of this, since 1988 all biographical information (occupation, marital status, family, first job and social background) is, in principle, collected during the first interview for new respondents in existing sample households. It should be noted that - due to the costs involved and the increased response burden-the main objective of surveying the biographical information in the course of the very first interview is not applied to the first wave of new subsamples. For example, in sample C (East Germany, field work started in 1990) the biographical questionnaire was first collected in 1992. Consequently, the surveyed persons in sample C who left SOEP before 1992 or who refused to complete the biography questionnaire in 1992 have no biographical information included in the SOEP data. Starting with Sample J in 2011 we now enable member of new subsamples to fill in an integrated questionnaire, combining individual and biographical questions. This procedure allows us to collect biographical information during the first wave without increased response burden, however at the expense of a slightly different individual questionnaire when compared to "old" samples. In such a case, the effected variables will be set to "-5 Not included in this version of the questionnaire" for the entire subsample.

Summing up, in principle most of the biographical information in the SOEP is collected by means of the so-called 'Lebenslauf' <u>(`life history') questionnaire</u>. Although naming conventions, positioning of questions and the scope of this questionnaire have been changed

¹ A general introduction into the SOEP database can be found in our Desktop Companion (DTC) at http://about.paneldata.org/soep/dtc/

and revised several times (see below), it has been addressed once at each respondent throughout the SOEP. Since 2000, a separate youth questionnaire exists which contains vouth-specific questions.² A whole new series of <u>age-triggered instruments</u> for collecting biographical data was implemented in 2003. The target of the *first* of these questionnaires is to collect information about *newborn* children. It is aimed at their mothers of children aged up to 15 months. As a result, the SOEP has started to survey the development of children from the very beginning of their life and will provide users with a completely new type of data. In 2005, a follow-up questionnaire targeted at children aged 2 to 3 years was implemented. Again, the information was collected from the mothers. It contained questions on the child's individual development and the mother's specific experiences during this formative period of raising the child. There will be follow-up interviews to collect data about these children at specific ages which are typically associated with decisions relevant to their individual development. The respective questionnaire targeted at children aged 5 to 6 was implemented in 2008. A questionnaire targeted at children aged 7 to 8 years is used for the first time in 2010. This questionnaire will be answered by mothers and fathers (in contrast to earlier agetriggered instruments which were answered by mothers, only) and will therefore delivered in two separate files. A questionnaire targeted at children aged 9 to10 years is used for the first time in 2012. In 2014 we introduced a specific questionnaire for pupils aged 11 to 12 years.

A chronological listing of the various changes related to the survey of biographically relevant information for the time period 1984 to 2014 can be found below. The differences in gathering information among and between the various sub-samples are reported with respect to 'Timing' (*when* respondents were asked), 'Coverage' (*which* parts of the biographical topics and single indicators were asked), and 'Positioning' of the biographical questions in the diverse survey instruments.

- 1984 The focus of the survey from samples A and B was the occupational biography. This information was collected (retrospectively) with the help of a 'life-course calendar' and covered the time period from the age of 15 up to the current age (or up until and including the maximum age of 65). The 'calendar' takes the form of a matrix with one column for every year of age and up to nine specifications of occupational activities (school, apprenticeship / training, military and community service, employed full time, employed part time, unemployed, househusband/wife, retired and other; question 62 in the standard Individual Questionnaire in Wave 1).
- 1985 The focus for samples A and B was on collecting marital and family status information in retrospect (questions 81-88 in the standard Individual Questionnaire in Wave 2). The number of children born up to that point in time

 $^{^2}$ Due to survey-related reasons biographical information was not asked of first-time respondents aged 16 or 17 years until 1999. For this group of persons, much of the biographical information (i.e. on marital status and family information, occupation history since the age of 16 and social background) can generally be reconstructed using variables collected by means of the Individual Questionnaire, i.e. from the yearly ongoing survey.

is collected in detail as well as the eventual date at which the children moved out of the parents' home (only female participants were asked those questions). In addition, residency during childhood, the date a person moved out of the parents' home, as well as the start, end and potential reasons for the termination of up to three marriages are asked of each surveyed person.

- 1986 The focus of the life history data was on social background and entry into the workforce (questions 10-13 and 80-87 in the standard Individual Questionnaire, Wave 3). Information on every surveyed person's parents is included, i.e. their year of birth and, where appropriate, the year of death, their level of education and vocational training as well as their working status at the time the respondent was 15 years of age. Furthermore, the father's type of gainful employment was also asked. With respect to entering the workforce, information is available on the age of the surveyed person when he/she first started to work and the type of employment he/she had. When appropriate, the age at each job change was also asked.
- 1987 No biographical information was collected in this year.
- 1988 The complete collection of biographical questions was included in the blue Individual Questionnaire for first time participants. For those persons who were new additions to the SOEP since 1985 and who had missed portions or all of the biographical questions, this missing information was collected in 1988. For this reason, it is only since 1988 that complete biographical information has been available on all three biographical areas for all persons surveyed up to this point (as long as they were still included in the SOEP population). Young adults up to age 17 were excluded from this retrospective collection of biographical information due to reasons of content (it did not make sense to collect the biographical information here). However, some technical problems arose when determining the exact minimum cut-off age of the persons included in this retrospective survey.
- 1989 to 90 During this time period, the form of the survey on biographical data from 1988 remained unchanged.
- 1990 The SOEP random sample was expanded. For the first time individuals and households in East Germany (sample C) were surveyed. However, biographical data for sample C were collected later on.
- Since 1991 New respondents of sample A (West Germany) and B (Foreigners / 'Guest Workers') answered the biographical questions in an independent Biography Questionnaire.
- 1992 Due to the differing occupational titles, educational degrees, and biographies between East and West Germany, an additional biography questionnaire was

developed for sample C (East Germany) which was first used in 1992 in order to cover all respondents in this sample. This additional questionnaire is identical with the western version in its structure and the format of its questions, with just a few answer categories being modified and speech delimitations were effected (for example, on occupational position or the description of the successfully completed apprenticeship). This extensive group of questions was also applied to everyone who had been a new addition to the survey in East Germany since 1993.

- 1994 An updated version of the biography questionnaire version called 'Lebenslauf' ('life history') was introduced for all the four samples A, B, C, and D1/D2.³ The formats of some of the questions were slightly changed, and new questions were added, although some questions were included for only one of the samples (i.e. questions relevant to immigration were only directed towards sample D).
- 1996 The Biography Questionnaire 'Lebenslauf' ('life history') was fully integrated for all samples, for example, using appropriate filter questions the immigration relevant information was also asked from persons in samples A to C in an identical form.
- 1998 Introduction of the supplementary sample E.
- 1999 The 1996 form of the Biography Questionnaire 'Lebenslauf' ('life history') was given to members of sample E for the first time.
- 2000 The 1996 version of the Biography Questionnaire 'Lebenslauf' ('life history') was changed slightly. For example, information on having own children is collected for men as well, as is the information on the respondent's mother's occupation at the time that the respondent was 15 years old.

A preliminary-version of the Youth Questionnaire was designed and given to 17 year old youths (only samples A to E). Data on social background were collected from young adults with single or no parents in the household.

In the year 2000, a new supplementary sample F with over 6000 surveyed households was established.

2001 The Biography Questionnaire 'Lebenslauf' ('life history') was further expanded and now also includes more questions on school, i.e. marks, and activities during childhood.
Biographical data are collected for the first time for all persons belonging to sample F using this updated Biography Questionnaire.

³ (A) 'West Germany', (B) 'Guest Workers / Foreigners', (C) 'East Germany', (D1/D2) 'Immigrants since 1984', persons from D2 were first surveyed in 1995.

The revised Youth Questionnaire, the standard version for the forthcoming years, is used in the field for all 17 year old teenagers in addition to the Individual Questionnaire.

- A new sample G is drawn, which is only targeted at high-income households,
 i.e. households with a monthly net household income of more than 7,500 DM
 (≈ 3,850 €). This sample was also asked retrospective information on inheritances, which was collected in 2001 for samples A through F.
- 2003 Persons from sample G answered the Biography Questionnaire for the 'first' time. The new questionnaire 'Mother and Child' was given to mothers of newborns (all samples).
- 2004 The Biography Questionnaire was slightly expanded with questions concerning the 'numbers of brothers and sisters' and the 'location a person lived at before reunification (East Germany, West Germany, abroad)'. The question on siblings is also asked in the Youth Questionnaire.
- 2005 The new questionnaire 'Mother and Child II' ("Infants") targeted at children aged 2 to 3 years was implemented (for all samples).
- 2006 Introduction of the supplementary sample H with valid interview information for about 2.600 individuals. As a standard procedure, these new respondents do not fill in the biography questionnaire in order to reduce response burden in wave 1.

Starting in 2006, the age for first-time respondents has been changed to be the calendar year in which the person turns 18 years of age. Those aged 17 in 2006 are asked to fill in the extended "Youth Questionnaire" (data is stored in the file \$PAGE17) instead of the "Individual Questionnaire" (data stored in \$P). These extended questions cover indicators on subjective well-being, health (including body measures), labor force participation and education.

- 2007 Members of Sample H have answered the biographical background questionnaire for the very first time.
- 2008 The new questionnaire 'Mother and Child III' ("Pre-School") targeted at children aged 5 to 6 years was implemented for the first time (for all samples).
- 2009 Introduction of the new subsample I with valid interview data on about 2.500 adults. As a standard procedure, these new respondents do not fill in the biography questionnaire in order to reduce response burden in wave 1.
- 2010 Members of Sample I have answered the biographical background questionnaire for the very first time. Members of Samples L1 and L2 are

answered only the first part of the biographical questionnaire. The new questionnaire 'Parents I' targeted at children aged 7 to 8 years was implemented for the first time.

- 2011 Members of the new subsample J are asked to fill in an integrated version of the individual questionnaire and the biographical background questionnaire. Members of subsamples L1 and L2 are asked to answer the second part of the questionnaire. Members of sample L3 are asked for the first part of the questionnaire.
- 2012 Members of the new subsample K are asked to fill in an integrated version of the individual and biographical questionnaire. Members of subsample L3 are asked to answer the second part of the biographical background questionnaire. The new questionnaire targeted at children aged 9 to 10 years was implemented for the first time.
- 2013 Members of the new subsample M1 are asked to fill in an integrated version of the questionnaire. Because the sample is targeted on persons with migrational background questions on the detailed migration biography are included (see chapter MIGSPELL).

The new pupil questionnaire for the 11 - 12 years old was implemented (for all samples).

A series of problems may emerge when combining biographical information and storing data collections spanning multiple waves. This is due to the fact that the biographical information over time both within and between the sub-samples of SOEP is not always consistent with regards to

- *Positioning* (this includes differences among the various surveying instruments, i.e. the Individual Questionnaire and the single Biography Questionnaire 'Lebenslauf' ('life history'), as well as differences in the position of several indicators in the various versions of the questionnaires),
- *Coverage* (this includes both the changes in the targeted population and the partitions of the survey asked of each person and the corresponding indicators used), and
- *Timing* (this refers to the point in time when the biographical information was collected for a person in relation to the very first survey).

The biography data sets can always be divided into time invariant (e.g. first year of immigration to Germany, first job, place a person grew up) and time dependent (e.g. marital status, number of children, occupational biography) variables. Whereas time invariant information is by definition valid at every point in time after it has been collected, the time dependent information originally collected needs to be updated whenever a change has occurred. Alternatively, the information that is still valid must be included over the entire

analysis period under investigation. In other words, since for the most part identical biographical information for different individuals is collected in SOEP at various points in time, all information regarding an eventual status change or an expansion of the original information must be accounted for over the entire time period of the analysis.

A yearly update of the biographical data therefore involves the following tasks:

- *Time dependent* information must be
 - collected for persons answering the survey questions for the first time and
 - carried forward or changed for persons repeating the SOEP interview.
- *Time invariant* information must be integrated into existing data sets for persons answering the survey questions for the first time.

The goal is for all biography relevant information provided to be up-to-date, without any loss of information with respect to the original variables, and in a user friendly form within the framework of the yearly data set updates. The time dependent variables will correspond then to the status of the most recently realized personal interview. The individual steps of the complex revision of the data sets are described in the corresponding documentation.

Additional Information:

- Unless otherwise indicated,⁴ the symbol '\$' in a variable name or a file name stands for a wave specific prefix or suffix: for example, the variable \$KMUTTI from the file \$KIND indicates the vector of the variables AKMUTTI, ..., ZKMUTTI, BAKMUTTI upt to BEKMUTTI from the file AKIND, ..., ZKIND to BEKIND. '\$\$' indicates the survey year (2 digits) and is used as a suffix: for example, NATION\$\$ stands for NATION84 to NATION10 from the files APGEN to BEPGEN.
- The file BIOLELA is mentioned frequently within the framework of the following documentation of the individual steps needed for generating biographical variables. This file is not a component of the standard updates of the SOEP data sets, but encompasses all of the biographical entries collected until 1996 (in the Individual Questionnaire and the Biographical Questionnaire) from the SOEP respondents. This file is rather complex due to the differences in the surveying procedures mentioned above and is therefore one central input for nearly all of the following variables on individuals who entered the survey prior to 1996. However, BIOLELA does not contain information necessary for updates (e.g. giving birth after having answered the Biographical Questionnaire). Furthermore, identical information is distributed over a multitude of single variables. The information in BIOLELA is only suitable for very restricted analyses without additional

⁴ The SOEP data set released in 2011 (SOEP V27) and later will include a two-letter rather than a single-letter wave prefix. Since we came to the end of the Latin alphabet with the letter Z in data release V26, we decided to use the wave prefix BA for the cross-sectional data format.

tests and supplements. Beginning with 1997, there are wave-specific \$LELA files containing the biography information as collected in the respective year. These files (i.e. BIOLELA and \$LELA) can be made available on request to interested users of the SOEP data, and a cumulative long format of these original files is available in our new distribution format SOEPlong (dataset BIO).

The following table displays in a general overview the full set of biographical information as surveyed in the Biography Questionnaire 'Lebenslauf' ('life history') in 2006 and the current version of the user-friendly edition of this information. The designated numbers in the Biography Questionnaire 'Lebenslauf' ('life history') refer to the 2006 version with all samples fully integrated; due to the multitude of differences in the data collection process (as mentioned above), this does not imply that all of the following named variables were collected from all respondents nor that all information is available accordingly in the final biographical files.

Table 1: Biographical data in SOEP

Files in the SOEP Database	Biography Sub-area	Number of Question in the 'Lebenslauf' Questionnaire (2006)	Comparable Questions in the Youth Question- naire (2006)	SOEP Target Population	Analysis Unit	Update Requirements (Source File for Update)	Status: Available / Not Available (up to Wave BE)
PPFAD	Country of birth	2, 3	61, 62	All persons surveyed	Individual	No	Available
PPFAD	Year of immigration	4	63	For persons not born in Germany	Individual	No	Available
MIGSPELL	Migration biography	migration modul in CAPI version		Sample M only	SPELL	No	Available
BIOIMMIG	Immigration biography		64, 65, 66, 67, 68, 69, 70, 71	For persons not born in Germany	Individual	No	Available
PPFAD	Living in East or West Germany in 1989	15a 16	-	All persons surveyed	Individual	No	Available
BIOPAREN	Place of childhood; Life at childhood residence; grew up with parents, Living together with parents	17,17a, 19, 20	72, 73, 75, 76	All persons surveyed	Individual	No	Available
BIOSIB	Number of brothers and sisters	18	74	All persons surveyed	Individual	Yes	Available
BIOPAREN	Parents living region, year of birth, year of death, nationality, country of birth	21, 22, 23, 23a	77, 78, 79	All persons surveyed	Individual	Partly (year of death from PPFAD)	Available

Files in the SOEP Database	Biography Sub-area	Number of Question in the 'Lebenslauf' Questionnaire (2006)	Comparable Questions in the Youth Question- naire (2006)	SOEP Target Population	Analysis Unit	Update Requirements (Source File for Update)	Status: Available / Not Available (up to Wave BE)
BIOPAREN	Religious affiliation of parents	28	85	All persons surveyed	Individual	No	Available
BIOSOC	Parents took care about efforts at school	29	41	All persons surveyed	Individual	No	Available
BIOSOC	Respondent's last school marks	30	37	All persons surveyed	Individual	No	Available
BIOSOC	Relationship to parents during youth	31	13	All persons surveyed	Individual	No	Available
BIOSOC	Sport and activities during youth	32, 33, 34, 35	16, 21,22, 25	All persons surveyed	Individual	No	Available
PBIOSPE	Occupational biography	36	-	All persons surveyed	Spell	Yes (\$P, \$PKAL)	Available
BIOSOC	Year and place of acquiring a school degree	37, 38, 41	27	All persons surveyed	Individual	No (although possible using \$P)	Available
\$PGEN	Level of school degree	39, 40, 42	28	All persons surveyed	Individual	Yes (\$P)	Available
BIOSOC	Number of foreign classmates in last attended school class	43	45	All persons surveyed	Individual	No	Available
BIOSOC	Target school degree	44, 45	29, 30	All persons surveyed	Individual	No	Available

Files in the SOEP Database	Biography Sub-area	Number of Question in the 'Lebenslauf' Questionnaire (2006)	Comparable Questions in the Youth Question- naire (2006)	SOEP Target Population	Analysis Unit	Update Requirements (Source File for Update)	Status: Available / Not Available (up to Wave BE)
BIOSOC	Target vocational degree	53, 54	48, 49	All persons surveyed	Individual	No	Available
BIOJOB	First job (age, occupational position, public sector, industry)	55, 56, 57, 58, 59, 60a, 60b	-	All persons surveyed	Individual	Yes, if person previously did not work (\$P)	Available
BIOJOB	Occupational changes	61	-	All persons surveyed	Individual	Yes	Available
BIOJOB	Last job (year, scope, public sector branch, occupational position)	62, 63, 64, 65, 66, 67	-	All persons surveyed	Individual	Yes	Available
BIORESID	Year since living personally in current apartment; second residence	68, 69	-	All persons surveyed	Individual	No	Available
BIOBIRTH BIOBRTHM	Births	70	-	All women surveyed; since 2000 men, too	Individual	Yes (\$P, \$PBRUTTO, \$KIND)	Available
BIOMARSY	Family status (marriage biography)	71, 72	-	All persons surveyed	Spell	Yes (\$P, \$PBRUTTO)	Available
BIOCUPLY	Partnership biography	partnership modul in	CAPI version	All persons surveyes	SPELL	Yes (\$P, \$BRUTTO)	Available
MIGSPELL	Migration biography	migration modul in C	API version	Sample M only	SPELL	Νο	Available

Files in the SOEP Database	Biography Sub-area	Number of Question in the 'Lebenslauf' Questionnaire (2006)	Comparable Questions in the Youth Question- naire (2006)	SOEP Target Population	Analysis Unit	Update Requirements (Source File for Update)	Status: Available / Not Available (up to Wave BE)
BIOAGE17	Youth	Youth Questionnaire		16 and 17 year old respondents	Individual	No	Available
BIOAGEL	Newborns	Mother & Child Ques	tionnaire	Mothers of newborns	Individual	No	Available
BIOAGEL	Infants	Questionnaire on chi aged 2 to 3 years	ldren	Mothers	Individual	No	Available
BIOAGEL	Preschooler	Questionnaire on chi aged 5 to 6 years	ldren	Mothers	Individual	No	Available
BIOAGEL	Elementary school	Questionnaire on chi between the age of s		Parents	Individual	No	Available
BIOAGEL	Elementary school	Questionnaire on chi aged 9 to 10 years	ldren	Mothers	Individual	No	Available
BIOEDU	Educational history			All persons surveyed	Individual	Yes	Available
Lifespell	Pre- and Post-Survey history	Drop- out studies		All persons	Spell	\$BRUTTO	Available

2 Biographical Information in the Meta File PPFAD (Month of Birth, Year of Death, Immigration Variables, Living in East or West Germany in 1989)¹

by Elisabeth Liebau, Christian Schmitt, and Ingrid Tucci

The file PPFAD includes, among other more survey related variables like responding status, some most important demographical information for each person who has ever participated in SOEP in at least one wave. These are, on the one hand, longitudinally checked data on sex (variable SEX) and the date of birth (year of birth in variable GEBJAHR in 4-digits and month of birth in variable GEBMONAT), and, on the other hand, generated demographic variables on the year of death (TODJAHR and TODINFO), on the migration background of an individual (MIGBACK and MIGINFO), on the year of the first immigration to Germany (IMMIYEAR), on the country of origin (GERMBORN and CORIGIN) as well as on the geographic area a person lived in prior to German unification (LOC1989). In the following section, the construction of these generated variables will be explained briefly.

2.1 The Month of Birth in the data set PPFAD

Introduction of variables

From wave T onwards (2003) the data set PPFAD contains – in addition to the year of birth – the month of birth (GEBMONAT). This new variable is accompanied by the supporting variable GEBMOVAL which indicates the data source for the month of birth.

GEBMONAT and GEBMOVAL can take the following characteristics:

• GEBMONAT: Month of birth;

1 (January) to 12 (December)

- GEBMOVAL: Month of birth— data-source
 - 1 Generated
 - 2 Info as stored in PPFAD
 - 3 Info derived from data set \$KIND
 - 4 Info derived from data set SP (own response)
 - 5 derived from data set \$LELA (own response)
 - 6 derived from BIOAGE01 (mother-child-questionnaire) (NEW with Wave W / Surveyyear 2006)

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¹ Based on earlier work of Joachim R. Frick, Olaf Groh-Samberg, and Florian Henkel.

7 derived from Youth Questionnaire (own response) (NEW with Wave Z / Surveyear 2009)

The month of birth was asked in wave S individual questionnaire (SP). Furthermore, the month of birth was asked in the biography data set, starting with wave T (\$LELA, file not available with the SOEP data distribution). Additionally the month of birth is recorded for all children within the file \$KIND (starting with wave T). With wave W, an further source of information was introduced with a number of biographical questionnaires, including the mother-child questionnaire (filled in by mothers of newborns), and a number of additional biographical questionnaires, where parents report on their children around ages three, six and eight (BIOAGE01, BIOAGE03, BIOAGE06, BIOAGE08a, BIOAGE08b). All these biographical questionnaires record the year and month of the child. Information from the Youth Questionnaire (self response, age 17) is also considered.

All these sources of information are used to derive the month of birth, where valid information is used to replace missings in one or more of the mentioned sources. This procedure provides the relevant information for most of the current panel members. The information remains missing for persons who lack any of the above information, including temporary dropouts or people who exited in a previous wave, and before providing data in any of the sources mentioned above. For some of those persons, the month of birth could be reconstructed (this refers primarily to newborns for whom the month of moving into the household is considered as a proxy in case no other reliable information is available). This reconstruction remains an approximation and might differ from the true month of birth in individual cases.

The variable GEBMOVAL displays an ordinal scaling of the level of reliability, where individual response on one's own date of birth is given preference over derived information, and parent response is considered more reliable at younger ages of the child.

2.2 Construction of variables

The month of birth is constructed in an hierarchical order from the files:

- Generated (basis: \$P, \$PBRUTTO \$KIND)
- \$KIND
- SP
- \$LELA
- BIOAGE01, BIOAGE03, BIOAGE06, BIOAGE08a, BIOAGE08b
- Youth Questionnaire (\$PAGE17)

whereas the latter information overrides the former.

This means the generated information will only be utilized if no further, questionnaire based information for the month of birth is available.

The generated month of birth could only be constructed for people who were born while their parents were members of the SOEP. The information was derived from two sources:

- For newborn children the month of moving into the household was used as an approximation of the real month of birth (relevant file \$PBRUTTO).
- For parents who reported a birth in a certain month, a link to the child was established, assigning the month of birth to the child (relevant file \$P).

Several adjustments and tests of the generated data have been done which showed that – in the cases in which the generated data was also collected by SP, LELA, KIND, and BIOAGE[n] – the data generation is almost always congruent with the collected data and therefore has proven to be reliable.

Frequencies: Month of Birth and Month of Birth: Data-Source (File: PPFAD / up to Wave BE)

		Frequency	Percent	Cumulative Percent
Valid	-3 Answer improbable	1	0.0	0.0
	-1 No Answer	32,336	29.4	29.4
	1 January	6,949	6.3	35.7
	2 February	6,408	5.8	41.6
	3 March	7,035	6.4	48.0
	4 April	6,368	5.8	53.8
	5 May	6,653	6.1	59.8
	6 June	6,297	5.7	65.6
	7 July	6,689	6.1	71.6
	8 August	6,489	5.9	77.5
	9 September	6,566	6.0	83.5
	10 October	6,307	5.7	89.3
	11 November	5,797	5.3	94.5
	12 December	6,016	5.5	100.00
	Total	109,911	100.0	

Table 1: GEBMONAT Month of Birth

Source: SOEP v31, doi: 10.5684/soep.v31

		Frequency	Percent	Cumulative Percent
Valid	-3 Not Valid	1	0.0	0.0
	-1 No Answer	32,336	29.4	29.4
	1 Generated from gebmonth	1,487	1.4	30.8
	(parents)			
	3 \$KIND, Info from mother	13,617	12.4	43.2
	4 Info From SP	26,492	24.1	67.3
	5 Info From \$LELA	26,403	24.0	91.3
	6 Info From bioage[n]	5,957	5.4	96.7
	7 Info from \$PAGE17	3,618	3.3	100.0
	Total			

Table 2: GEBMOVAL Month Of Birth, Data Source

Source: SOEP v31, doi: 10.5684/soep.v31

2.3 Year of birth

(not generated)

2.4 Year of death

Variable TODJAHR

Year of death - 4 digits -

The Variable TODJAHR contains the four digit year entered as the year of death.

Codes

\$\$\$\$ effective year entered for persons whose year of death could be determined

- (1) from the drop-out file PBR_EXIT7, that is, the outcome of the yearly field work
- (2) within the scope of the Infratest-Verbleibstudie (Study conducted by Infratest to follow-up on drop-outs) carried out in 1992
- (3) within the scope of the Infratest-Verbleibstudie (Study conducted by Infratest to follow-up on drop-outs) carried out in 2001
- (4) within the scope of the Infratest-Verbleibstudie (Study conducted by Infratest to follow-up on drop-outs) carried out in 2007
- (5) within the scope of the Infratest-Verbleibstudie (Study conducted by Infratest to follow-up on drop-outs) carried out in 2008

Missing codes

(-2) Persons currently living or no longer existing in the sample

Essentially, the deaths of SOEP respondents are reported in the course of the yearly household interview during which the status of the currently living members of the household, as well as the changes due to births and deaths since the last year are surveyed. Furthermore, within the framework of, up to now, three subsequent address investigations of SOEP drop-outs ("Infratest-Verbleibstudie"), demographical drop outs due to mortality or move abroad have been identified. The mortality information is used in generating the variable TODJAHR.

In the first "Verbleibstudie" conducted from April to June in 1992 a total of 53 persons could be identified as deceased. In incorporating this information into the variable TODJAHR attention was given to the fact that an exact year of death could be determined for only 35 of these persons. An exact date was missing for 16 persons, that is, only the qualitative information on their death was available. As a substitute for these cases, the year of the Wave

⁷ Help for old friends: The file PBR_EXIT includes all observations that exited from survey households since the previous wave for demographic reasons (death, emigration). Together with the file PBR_HHCH (covering observations who changed household from one wave to the next) these two files replace the file YPBRUTTO used in former releases of SOEP data.

in which the person dropped out of SOEP was used. For 2 persons implausible entries were corrected.

Within the scope of the second Infratest-"Verbleibstudie" conducted in 2001, over 700 persons were identified as deceased. Included in this number are multiple identifications, i.e., persons who were already determined to be deceased through the standard follow up process or in course of the first "Verbleibstudie 1992" mentioned above. This displays essentially a very high correspondence of results from the standard follow up and the ex-post determination of the time of death. For 10 persons the missing information on the year of death was imputed with the help of the year in which they dropped out of the SOEP sample.

In the few cases in which there were conflicting information between the first two follow-up studies and the information from PBR_EXIT (formerly YPBRUTTO), in principle the information from the "Verbleibstudie" was used.

In the third of those studies, another 21 individuals were identified as deceased between 2001 and 2005. For 18 of those persons a valid year of death could be investigated, the remaining three observations are set to the standard missing code "-1".

Again, some of these deaths have also been registered in the most recent of those follow-up studies which was carried out in 2008. In this study a total of 982 individuals were identified as deceased some of which date back to the late 1980s.

Variable TODINFO Year of death – source of information

Codes

- 1 'from continued surveying (PBR_EXIT / YPBRUTTO)'
- 2 'Infratest-Verbleibstudie (Follow-up Study) 1992'
- 3 'Infratest-Verbleibstudie (Follow-up Study) 2001'
- 4 'Infratest-Verbleibstudie (Follow-up Study) 2007'
- 5 'Infratest-Verbleibstudie (Follow-up Study) 2008'

For all of the persons who could be identified as deceased, the variable TODINFO contains the corresponding source of information.

2.5 Immigration information

Variables MIGBACK and MIGINFO

The objective of the variable MIGBACK is to identify if an individual has a migration background according to the following characteristics: (1) being an immigrant, (2) having or having had a non-German citizenship, (3) having at least one parent who is either non-German or who was born outside Germany. Respondents with an indirect migration background belong to the so-called second and subsequent (third) generations. Based on all persons who ever have been part of the SOEP (i.e., the population in the file PPFAD), MIGBACK consistently defines the migration background as either direct or indirect or, due to missing values on GERMBORN, as not further differentiable.

Variable MIGBACK

Individual Migration Background

Code	Label	Frequency	Percent
-1	No information available	6,669	6.1
1	No migration background	72,167	65.7
2	Direct migration background	14,967	13.6
3	Indirect migration background	13,833	12.6
4	Migration background, not differentiated	2,275	2.1
	Total	109,911	100.0

Source: SOEP v31, doi: 10.5684/soep.v31

Besides the variable GERMBORN which indicates whether the person has a direct migration background (i.e. if he/she was born outside Germany and immigrated after 1949) the timevariant information on nationality is important too. In order to build the indicator of the migration background, the first step consists in catching all available information on citizenship and citizenship change(s). Therefore the NATION\$\$ variables in the \$PGEN files and additionally the information on the acquisition of German citizenship (naturalization) available in different years (\$P files) were used. Accordingly, people who answered that they acquired German citizenship after birth (i.e. through naturalization) are recoded as having a migration background. In order to identify also the citizenship of children who have completed neither the personal nor the biography questionnaire, proxy information gathered from the head of the household in 1984 and 1988 (variables AK07A and EK03A) were used. Finally, by using the field agency's (TNS Infratest) proxy information on nationality, it is possible to determine if children or persons who are part of the SOEP gross sample ("Brutto") but never answered the person questionnaire or the biography questionnaire, have a migration background. But the personal information – whether proxy or direct - is not sufficient to know if a person has a migration background because the change of nationality for some persons might have occurred before they took part in the SOEP-survey. For some of those respondents the information on on the time of becoming German citizen is used to determine the migration background. This information was asked the first time in 2002 so it is not available for all SOEp-respondents.

In a second step information on mothers and fathers are used. In particular for those parents who were also SOEP-respondents we use the variable constructed accordingly to step one. With this variable we know whether the parents have themselves a migration background. Additionally we use proxy information given by the respondent on her/his parents, such as the VNAT and MNAT (nationality of the mother and the father) and the variable on the country of origin of the parents such as VORIGIN and MORIGIN. Those variables are available in BIOPAREN. A respondent is given a migration background as soon as at least one of his or her parents is of migrant origin. Finally, the variable using information concerning the immigrant group (BIIMGRP) located in the BIOIMMIG file is also used as an additional indicator.

MIGINFO informs on the sources used to construct MIGBACK. There are four different possible codes indicating whether the information stemmed from direct response or proxy personal information and if parental information (nationality, country of birth, etc.) is available or not.

Code	Label	Frequency	Percent
-1	No information available	6,669	6.1
1	Direct information without parental information	37,104	33.8
2	Proxy information without parental information	992	0.9
3	Direct information with parental information	39,941	36.3
4	Proxy information with parental information	25,205	22.9
	Total	109,911	100.0

Variable MIGINFO

Source of Information to define Migration Background

Source: SOEP v31, doi: 10.5684/soep.v31

A part of the population identified as "without a migration background" (MIGBACK coded 1) and for which we have no parental information (code 1 and 2 on MIGINFO) however might have a migration background. Unfortunately this cannot be tracked due to the lack of available data (parental information and information on nationality before the respondents entered the SOEP survey). Also, due to the absence of exact information on the status of parents at migration, respondents born in Germany having parents born abroad might have parents who are themselves classified as migrants because one parent at least is born outside Germany. As we do not know whether the parents who have migrated are Germans, or whether they are emigrants of German descent from Eastern Europe or foreigners, there is a certain degree of uncertainty concerning the origin of the parents and as a result the migration

background of the respondents. As a result the population with a migration background in the SOEP might be overestimated.

File	Information/variable used
PPFAD	Born in Germany (GERMBORN)
PPFAD	Country of origin (CORIGIN)
PGEN	Nationality (NATION)
\$P	Acquisition of German citizenship (at birth/after)
\$P	Double nationality
\$P	Place of birth of mother
\$P	Place of birth of father
\$P	Both parents born in Germany (Yes/No)
MP	Emigrant of German descent from Eastern Europe
\$JUGEND	Acquisition of German citizenship (at birth/after)
\$JUGEND	Place of birth of the mother
\$JUGEND	Place of birth of the father
BIOIMMIG	Status group of migrant (BIIMGRP)
BIOPAREN	Country of origin of mother (MORIGIN)
BIOPAREN	Country of origin of father (VORIGIN)
BIOPAREN	Nationality of father (VNAT)
BIOPAREN	Nationality of mother (MNAT)
\$LELA	Place of birth of mother
\$LELA	Place of birth of father
\$PBRUTTO	PNAT

Overview 2	Input-Variables for Generating M	igration Background
	input variables for deficiating in	Bration DuckBroana

Source: SOEP v31, doi: 10.5684/soep.v31

Variables IMMIYEAR, GERMBORN and CORIGIN

The objective of these variables, based on all persons who ever have been a part of SOEP (i.e., the population from PPFAD), is to identify individuals who have immigrated to Germany from any other country since 1949 (the founding year of the Federal Republic of Germany). For this group of persons the variable IMMIYEAR specifies the calendar year (4 digits) in which the first immigration to territories of the Federal Republic of Germany occurred. Persons who had immigrated to Germany up until and including 1948 are included in the group of those identified as "born in Germany" (see variable GERMBORN). The variable CORIGIN specifies the country of origin.

The "Immigrant Sample" D classifies everybody who moved from abroad to West Germany as "immigrant", including persons who came from the GDR (' \ddot{U} bersiedler'). However, this latter group does not have an immigrant status as a result of the definition used here and as such, *Overview 1* may show a surprisingly low share of immigrants for Sample D. A specific problem regarding immigration to Germany arises from the group of persons who were born in Eastern Europe at a time when these regions were considered German territory and who

later immigrated to the Federal Republic of Germany. For this group, according to the formulation of the corresponding SOEP questions regarding the country of origin, inconsistent answers can be expected. If at all possible, these persons are identified as immigrants in the variables described here (cumulative up to Wave R this affects merely 115 persons).

Overview 1 illustrates that across all SOEP sub-samples, persons have been identified as being immigrants. Therefore, an analysis on immigration questions clearly should *not* be limited to samples B and D. It is relevant to note that – almost by definition – the share of *non*-immigrants in Sample B (the "foreigner" sample which was started in 1984) increases permanently due to children born to these persons after their migration to Germany ("second-generation"). The large proportion of individuals with a "No Answer" Code in Sample G is mainly due to a change in the selection scheme for the second Wave of the High Income Sample. Therefore biographical information is not available for sample G respondents which were not followed up in 2003.

	No Answer (-1/-3)	Born in Germany or immigrated before 1949 (1)	Immigrated since 1949 (2)	Total
				14 507
[1] A Original Sample (DE-West)	59 0.4	13,993 96,5	455 3.1	14,507 100.00
[2] B Migration (up to 1983, DE-West)	58	1,540	3,869	5,467
[2] B Migration (up to 1983, DE-West) %	1.1	28.2	70.8	100.00
[3] C Original Sample (DE-East)	7	6,842	97	6,946
%	0.1	98.5	1.4	100.00
[4] D 1994/5 Migration (1984-92/94 DE-West)	4	587	1,001	1,592
%	0.3	36,9	62.9	100.00
[5] E 1998 Refreshment	1	2,222	200	2,423
%	0.0	91.7	8.3	100.00
[6] F 2000 Refreshment	7	12,052	1,462	13,521
%	0.1	89.1	10.8	100.00
[7] G 2002 High-Income	675	2,441	126	3,242
%	20.8	75.3	3.9	100.00
[8] H 2006 Refreshment	67	2,678	211	2,956
%	2.3	90.6	7.1	100.00
[9] I 2009 Incentivization	9	2,412	271	2,692
%	0.3	89.6	10.1	100.00
[10] J 2011 Refreshment	2	4,912	695	5,609
%	0.0	87.6	12.4	100.00
[11] K 2012 Refreshment	4	2,335	294	2,633
%	0.2	88.7	11.2	100.00
[12] L1 2010 Birth Cohorts (2007-2009)	23	3,048	966	4,037
%	0.6	75.5	23.9	100.00
[13] L2 2010 Family Types	41	4,627	590	5,258
%	0.8	88.0	11.2	100.00
[14] L3 2011 Family Types	10	1,689	118	1,817
%	0.6	93.0	6.5	100.00
[15] M1 2013 Migration (1995-2010)	0	1,398	3,923	5,321
%	0	26.3	73.7	100.00
Total No.	967	62,776	14,278	78,021
%	1.2	80.5	18.3	100.00

Overview 1: Distribution of the Immigration Information According to SOEP Samples A to M (up to Wave BE, 2014)

Source: All survey participants with at least one SOEP interview from 1984 to 2014 (n=78,021); SOEP v31, doi: 10.5684/soep.v31

The objective of generating immigration information in PPFAD is to fill the variables GERMBORN, CORIGIN and IMMIYEAR for all of the survey participants who have had at least one SOEP interview, as well as for the children in all households who have realized interviews; the informational base for permanent non-responders is not sufficient. The elements involved in generating the immigration information are those listed in the *Overview* 2 taken from the wave specific individual questionnaire or from the course of the SOEP installed variations of the "Biography/Life history" questionnaires:

- \$P (wave-specific survey data from individual questionnaire),
- \$PAUSL (wave specific survey data collected only for sample B from the personal data questionnaire up until Wave M),
- \$PBRUTTO (wave specific information collected by the interviewer on all household members),
- BIOLELA (integrated biographical file for the years 1984 to 1995 = Wave A to Wave L)
- \$LELA (Curriculum vitae information for those interviewed for the first time since 1996 = wave M)
- \$JUGEND (youth questionnaire for 16-17 year olds since 2000, wave Q) and \$PAGE17 (extended youth questionnaire for first-time respondents since 2006, wave W).

Difficulties in generating the immigration information arise in part for those persons for whom none of the mentioned information was originally surveyed (for example, in the *"Lebenslauf-Fragebogen"* Biographical Questionnaire): This affects in particular sub-samples A and C and in most cases is caused by the fact that these persons did not take part in or no longer took part in the SOEP survey at the time that the survey with the immigration relevant questions was implemented (see Introduction). Questions regarding immigration were first asked of survey participants in sample A in 1990 and the Biographical Questionnaire was first included in the eastern sample C in the third wave (1992) out in the field. Moreover, Item-Non-Response is also significant, i.e., not answering a question. In order to minimize the number of missing entries for immigration relevant variables, for persons for whom corresponding information is missing, information from other variables or from the household context are used to the extent that these permit inferences on the immigration biography of the individual.

Variable	File	Variable Label	Sample
AP62A	APAUSL	Country of birth	В
BP98A	BPAUSL	Country of birth	В
CP98AB	CPAUSL	Country of birth	В
DP95A	DPAUSL	Country of birth	В
EP88A	EPAUSL	Country of birth	В
FP105A	FPAUSL	Country of birth	В
GP105A	GPAUSL	Country of birth	В
HP105A	HPAUSL	Country of birth	В
IP105A	IPAUSL	Country of birth	В
JP105A	JPAUSL	Country of birth	В
AP63A	APAUSL	Year moved to Germany	В
BP99A01	BPAUSL	Year moved to Germany	В
CP99AB01	CPAUSL	Year moved to Germany	В
DP96A01	DPAUSL	Year moved to Germany	В
EP89A01	EPAUSL	Year moved to Germany	В
FP106A01	FPAUSL	Year moved to Germany	В
GP10801	GP	Year moved to East, West Germany (Filter)	AB
GP10802	GP	Year moved to East, West Germany	AB
GP10803	GP	Area of origin	AB
GP106A01	GPAUSL	Year moved to Germany	В
HP108B01	HP	Year moved to East, West Germany (Filter)	AB
HP108B02	НР	Year moved to East, West Germany (Inter)	AB
HP108B03	HP	Area of origin	AB
HP106A01	HPAUSL	Year moved to Germany	В
IP10801	IP	Year moved to East/West Germany (Filter)	ABC
IP10801	IP	Year moved to East/West Germany (Titler)	ABC
IP10802	IP	Area of origin	ABC
IP106A01	IPAUSL	Year immigrated to Germany	В
JP108B01	JP	Year moved to East/West Germany (Filter)	ABC
JP108B01	JP	Year moved to East/West Germany (Titler)	ABC
JP108B02	JP	Area of origin	ABC
JP106A01	JPAUSL	Year immigrated to Germany	В
LPGRUPPE	LPBRUTTO	Immigration group	D
LPHERKFT	LPBRUTTO	Country born in	D
MP90A01	MP	German	ABCD
MP90A01 MP90A02	MP	Emigrant of German descent from Eastern	ABCD
WIF JUAUZ		Europe	ABCD
	MP	Has already lived in Germany in 1984	ABCD
MP90A03 NP101	NP	Born in Germany	ABCD
NP101 NP102	NP	Has already lived in Germany in 1984	ABCD
OP103			
	NP	Born in Germany	ABCDE
OP104	NP	Has already lived in Germany in 1984	ABCDE
PP117	NP	Born in Germany	ABCDE
PP118	NP	Has already lived in Germany in 1984	ABCDE
QP12101	QP	Born in Germany?	ABCDEF
QP12102	QP	Country of birth	ABCDEF
QP122	QP	Has already lived in Germany in 1984	ABCDEF
QP124	QP	Born in Germany?	ABCDEF
RP11701	RP	Born in Germany?	ABCDEF
RP11702	RP	Other country of birth	ABCDEF
RP118	RP	Has already lived in Germany in 1984	ABCDEF

Overview 2: Input-Variables for Generating Immigration Information

Variable	File	Variable Label	Sample
RP120	RP	Foreign citizenship: Born in Germany?	ABCDEF
SP120	SP	Foreign citizenship: Born in Germany?	ABCDEFG
TP121	ТР	Place of residence before reunification 1989	
TP126	ТР	Foreign citizenship: Born in Germany?	ABCDEFG
UP130	UP	Foreign citizenship: Born in Germany?	ABCDEFG
VP139	VP	Foreign citizenship: Born in Germany?	ABCDEFG
WP131	WP	Foreign citizenship: Born in Germany?	ABCDEFG
XP142	ХР	Foreign citizenship: Born in Germany?	ABCDEFGH
YP136	YP	Foreign citizenship: Born in Germany?	ABCDEFGH
ZP141	ZP	Foreign citizenship: Born in Germany?	ABCDEFGHI
BAP134	ВАР	Foreign citizenship: Born in Germany?	ABCDEFGHI
BBP144	BBP	Foreign citizenship: Born in Germany?	ABCDEFGHJ
BCP142	ВСР	Foreign citizenship: Born in Germany?	ABCDEFGHJK
BDP146	BDP	Foreign citizenship: Born in Germany?	ABCDEFGHJKM
P031Z	BIOLELA	Year of immigration to Germany	D
P051Z	BIOLELA	Year of immigration to Germany	D
P060Z	BIOLELA	Has always lived in Germany since immigration	D
P04Z	BIOLELA	Country of birth	D
P021Z	BIOLELA	Lived where in 1984?	D
B34	BIOLELA	Area of origin	ABC
B36	BIOLELA	Country of birth	ABC
B37	BIOLELA	Year of immigration to Federal Republic of Germany	АВС
\$B03	\$LELA	Country of birth	ABCDEFGHI
\$B02	\$LELA	Born in Germany?	ABCDEFGHI
\$B04	\$LELA	Year of immigration to Federal Republic of Germany	ABCDEFGHI
QJ54	QJUGEND	Born in Germany?	ABCDE
QJ55	QJUGEND	Country of birth	ABCDE
QJ56	QJUGEND	Year of immigration to Federal Republic of Germany	ABCDE
\$J61	\$JUGEND	Born in Germany?	ABCDEFGHI
\$J62	ŚJUGEND	Country of birth	ABCDEFGHI
\$J63	\$JUGEND	Year of immigration to Federal Republic of Germany	ABCDEFGHI
ZZJAHR	Generated on the basis of the variables \$PZUG from the files	Immigrations to Germany which were documented through the interview within the scope of the field work. This information is used	ABCDEFGHI
	\$PBRUTTO	only if no other valid information is available.	

In the following sections, the PPFAD variables are described in detail; special attention is given to the central filtering function of the variable GERMBORN in reference to the variables IMMIYEAR and CORIGIN.

Variable GERMBORN Born in Germany?

Codes

- 1 Persons who were born in Germany (including immigrants before 1949)
- Persons who have immigrated to Germany since 1949
 Missing codes
- -2 For permanent non-respondents
- -1 Provided that no entry could be derived from all of the variables

The following persons have been identified as immigrants despite the fact that information is missing for the variables relevant to GERMBORN (The process follows the sequence stated here, i.e., if the first condition does not hold, then the second condition is tested and so on):

- 1.1 Persons from sample D for whom a foreign country as the country of origin is entered in the address protocol in the first survey wave (variable LPHERKFT). The variable CORIGIN is also given the respective value.
- 1.2 Persons with valid entries for the variable IMMIYEAR who over the course of their survey in SOEP have at least once indicated a non-German nationality. This nationality is alternatively used instead to generate the variable CORIGIN.
- 1.3 Persons whose mothers have immigrated after having given birth to this individual in case the mother's immigration occurred less than 18 years after the birth of the respective person. For CORIGIN and IMMIYEAR, in this case, information from the mother's immigration history is used, assuming that mother and child have always lived together.
- 1.4 For persons who have acquired an educational degree abroad, who at any time have indicated a non-German nationality and in whose households (given by HHNR) immigrants reside, CORIGIN is given the corresponding value of the nationality; as a rule IMMIYEAR remains "missing" ("-1").

On the other hand, for the following persons it is assumed that they were born in Germany:

- 2.1 Persons from sample D for whom in the first survey wave Germany as the country of origin is entered in the address protocol.
- 2.2 Persons whose mothers were born in Germany or had immigrated before giving birth.
- 2.3 Minor children who live in a household with no immigrants.
- 2.4 Persons from samples A, C, E, F, G and H who live in a household with no immigrants and who have never indicated a non-German nationality.

2.5 Persons who state in 2012 that their country of birth lays today outside Germany while they indicated to be born in Germany in a previous wave. This concerns in particular respondents who have Eastern European countries as country of birth (Vertriebene).

Furthermore, generating immigration variables proves to be difficult for persons who in the course of the survey years submit conflicting answers on whether or not they were born in Germany. The number of these inconsistencies has increased with the inclusion of the yearly repetition of the corresponding question in the individual data questionnaire (2000). In such cases, as a rule decisions can only be based on plausibility and in comparison with further answers. If, for example, concrete information on the country of origin or the immigration year exists, then it is assumed that the person is an immigrant. For such cases where the individual information given by the person itself is not strong enough to base a decision on, then additional information from the household context is applied. If no final decision on the basis of all available information can be made, then the person's data file is run through the generation process described above.

In assessing the cases with inconsistent answers it must be considered that the questions relevant for GERMBORN in the SOEP surveying instruments are based on different definitions of "Germany". The questions from 1990 to 1993 that related to the regions of the Federal Republic of Germany and the German Democratic Republic (DDR) since 1949, respectively have been switched in the Biographical Questionnaire since 1996 to "the Federal Republic of Germany (West Germany), the German Democratic Republic (East Germany) or Germany as defined at the time of your birth". From this, answers which appear to be in contrast to each other could emerge for persons who were born prior to 1949 in "formerly German regions" in Eastern Europe which today are no longer part of the Federal Republic. Persons belonging to this group are considered to be, in the manner described here, immigrants if they immigrated after 1949.

For persons who, according to GERMBORN, are not born in Germany, the variables IMMIYEAR and CORIGIN should designate the year of the initial immigration to Germany, respectively the country of origin.

Variable IMMIYEAR Year of the initial immigration to Germany after 1948 (4 digits)

Codes

1949 ... 2013 Immigration year

Missing codes

- -3 for successfully surveyed persons without a valid entry for the immigration variables (GERMBORN could not be filled with a valid answer)
- -2 if born in Germany or immigrated before 1949, respectively and survey participants without an interview
- -1 Immigrants for whom no valid answer can be derived from all the original variables

Persons who have been identified as immigrants and for whom it was not possible to determine the immigration year from the original variables are assigned the following values:

- 1. The year of entry into SOEP, in the event that \$PZUG from the file \$PBRUTTO indicates the code "moved into household from abroad" (see the variable ZZJAHR in *Overview 2*)
- 2. The year of the mother's immigration, in the event that the mother had immigrated prior to the year the person turned 18 years of age.

In 2013 in sample M were the whole migration biography (up to 15 cross country moves) asked, for cases where several stays in Germany are recorded (see migspell.dta) immiyear contains the year of immigration for the last move to Germany.

Variable CORIGIN Country of origin

Codes

1	Germany
2 to 178	Turkey, (Ex-)Yugoslavia, Greece, Italy, Spain, Ruanda
222	unspecified Eastern Europe
333	other unspecified foreign country
444	unspecified countries within EU

Missing codes

- -3 for successfully surveyed persons without a valid entry for the immigration variables (GERMBORN could not be filled with a valid answer).
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- -2 all survey participants without an interview
- -1 Immigrants for whom no valid answer is derivable from all of the original variables

The variable CORIGIN represents the country of origin, respectively of birth. Every person born in (West and East) Germany is assigned code "1" for the variable CORIGIN (see also the variable GERMBORN). Starting with the January 2004 release of SOEP-data (including wave S (survey year 2002)), the information on the country of origin is also contained in the 95% Scientific-Use-Version, which had not been the case before (the same is true for the variables on nationality in \$PGEN).

Persons, who have been identified as immigrants and from whose original variables no country of origin could be determined, are assigned as a resource the following codes:

- 1. The code of the country which corresponds to their non-German nationality.
- 2. The code "222", in the event that it is evident from the original variables (code "2" in GP10803 to JP108B03) that the person in question immigrated from Eastern Europe, respectively from the former German territories in Eastern Europe. This also includes, under certain circumstances, a small number of persons from sample D if they were identified in P070Z as persons of German descent from Eastern Europe.
- 3. The code "333", in the event that from the original variables (code "3" in GP10803 to JP108B03) it is evident that the person comes from a region other than Eastern Europe.
- 4. The country of origin given in the address protocol from sample D (variable LPHERKFT).
- 5. The mother's country of origin in the event that the mother has immigrated prior to the year the person turned 18 years of age.

2.6 Living in East or West Germany in 1989

The variable LOC1989 in the meta-file PPFAD provides information about the geographic area a person lived in *prior to* the German reunification, differentiating "East Germany (DDR incl. East Berlin", "West Germany (Bundesrepublik Deutschland incl. West Berlin)", and "abroad (Ausland)". This information has been generated for all individuals in SOEP.

Variable LOC1989 "Where did you live in 1989?"

Codes

- 1 East Germany (German Democratic Republic [DDR] including East Berlin)
- 2 West Germany (Federal Republic of Germany [BRD] including West Berlin)
- 3 Abroad (Ausland)

Missing Codes

- -2 does not apply; born after 1989
- -1 not available

After asking this information from all respondents in 2003 (variable TP121 in file TP), a corresponding question has been included in the biography questionnaire since wave U (2004) [Question 16 / variable UB16 in file ULELA, UJ58 in file UJUGEND] which will collect this time-independent information from all future first time respondents. For all respondents interviewed up until 2003, the following information was used as input to generate LOC1989:

- Information on place and date of last school attendance [variables BSSCHEND and BSSCHWO in file BIOSOC / variables \$B38 and \$B3701 in file \$LELA with \$ starting in wave U, 2004],
- Sample affiliation [variable PSAMPLE in file PPFAD],
- year moved in at current address [variable BRMOVEIN in file BIORESID / variable \$B68 in file \$LELA with \$ starting in wave U, 2004],
- sample region [variables \$SAMPREG in file PPFAD],
- year of first immigration to Germany [variable IMMIYEAR in file PPFAD]
- In case of inconsistent information from these various sources, the data collected in 2003 via variable TP121 and the information from the biography questionnaire collected since 2004 is considered superior. Persons without any individual information and aged less than 18 years in 1989 were assigned parental information, if available.
- The variable LOC1989 is completed for SOEP samples A through M.

Variab	le LO	C1989

Whe	ere did you live in 1989?	Freq.	Percent	Cum.
[-2]	trifft nicht zu	28,993	26.4	26.4
[-1]	keine Angabe	12,590	11.5	37.8
[1]	East Germany (DDR) incl. East Berlin	14,235	13.0	50.8
[2]	West Germany (FRG) incl. West Berlin	47,129	42.9	93.7
[3]	Abroad (Ausland)	6,964	6.3	100.00
	Total	19,911	100.00	

Source: POPULATION of PPFAD SOEP v31, doi: 10.5684/soep.v31

3 MIGSPELL: Migration-History of Respondents

by Michael Kostmann, Ingrid Tucci¹

including updates relating to the 2014 survey by Klaudia Erhardt

3.1 Remarks on the inclusion of new cases from the 2014 wave

In the 2015 release of migspell, the migration biographies of 275 new respondents were added. There have been some changes in the questions from which migspell originates², resulting in additional or absent information in some of the variables of the new data. Specifically, the modifications only affect the migration histories of respondents born outside of Germany.

Because the next survey, in 2015, will include the new sample M2 and further changes in the questions of the migration history, we decided to adapt the 2014 migration history data at best to the existing structure of the migspell data, and to postpone the decision on the ultimate structure until the next wave is ready to be included.

In short, there are two variables with additional levels: status and lfgroup. The additional levels are marked "2014 only". For the 2013 migspell data, these levels are partly included in the "other status"-Variables (ostatus, ostatusde, ostatusoc).

Questions 8 and 17 of the 2014 questionnaire would have allowed for a differentiation of the immigrant status between "EU-Citizens" and "Non-EU-Citizens". In view of applying it to only 177 new respondents who were not born in Germany, the further differentiated levels were collapsed to fit the status variable of the 2013 release of migspell.

Unlike the 2013 survey, the 2014 survey did not provide for open answers if none of the status categories applied. In the first edition of migspell the "other status"-variables were generated from the open answers. For lack of open answers, the "other status"-variables have only the levels -2 ("does not apply") or 5 ("other") in the 2014 wave.

Finally, a new variable "syear" designating the survey year is included in the new release of migspell.

The following parts of the documentation stem from 2013 and are modified to account for the described alterations in the variables. However, the documentation does not incorporate the source variable names for the 2014 survey year into the detailed description of the generated migspell variables (see chapter 1.5) and the flow charts of the migration biography (see pp 4 and 5). These variable names are composed of the acronym of the wave ("bd" for 2013, "be" for 2014), followed by an indicator of the question number, which may change in each survey year.

¹ Contact: itucci@diw.de

² See questions 16 to 26 of the 2013 questionnaire and 6 to 20 of the 2014 questionnaire

As most cases of migspell stem from the 2013 survey, and as the next wave will entail still other changes, it seemed justifiable to do without detailing also the source variable names and question numbers for wave 2014.

3.2 Content

MIGSPELL is a dataset in spell-format in which only the population surveyed in the new IAB-SOEP migration sample (Sample M) is included. With the new IAB-SOEP Migration sample, migration history data was collected for the first time. This was done by means of a loop structure in the questionnaire. Two different loops were included: the one aimed at persons born abroad (i.e. migrants) and the one aimed at persons born in Germany. The two flow charts (see Figures 1 and 2 below) illustrate this complex part of the questionnaire. The dataset MIGSPELL was created in order to facilitate the use of the data on the migration biography of respondents.

MIGSPELL describes 1) the stays of migrants in different country before coming to Germany, i.e. their migration biography, as well as 2) the staying abroad of respondents born in Germany. The variable MIGFILTER enables to make the distinction between those two population groups. Each spell of MIGSPELL stands for a stay either in Germany or in another country (birth country or other country). Respondents were asked only about stays lasting more than three months. For each respondent, an additional spell has been generated relating to the period from birth to first move (if there has been any), resp. from birth to interview date (if the respondent has not moved). This entails the advantage that all adult respondents included in the IAB-SOEP Migration Sample are represented in the dataset, not only those ones that had experienced a move.

The variables shed light on the countries in which respondents now living in Germany stayed up to the survey year 2013, how long they lived in those countries and under which way they moved there and to Germany. Figures 1 and 2 show the original variables used to generate MIGSPELL as well as the number of observations. The complete list of the generated variables is shown in the table with German and English labels.

The dataset is delivered in spell format. Each spell is identified by the variable MIGNR. This variable counts the spells per respondent, beginning with 0, so that its value shows the number of moves a respondent has performed. There is no constant observation unit as every person has as many spells as it stayed in different countries, whereby those stays can be of varying length. This can be observed using the variables START and END. The stay in the country of birth is included as the first spell and the stay in Germany lasting up until now as the last spell.

Table 1: List of Variables in MIGSPELL

Variable	German	English
HHNR	Ursprungshaushaltsnummer	Original Household Number
PERSNR	Personennummer	Person Number
MIGNR	Spellnummer	Spell number
MIGFILTER	Population	Population
BCOUNTRY	Geburtsland	Birth country
NSPELLS	Spellanzahl pro Person	Total number of spells per person
STARTY	Jahr des Wegzugs	Year of migration
STARTMO	Monat des Wegzugs - Original	Month of migration – Original
STARTMI	Monat des Wegzugs – Imputiert	Month of migration – Imputed
START	Beginn des Aufenthalts, Monat und Jahr	Begin of stay, year and month
END	Ende des Aufenthalts, Monat und Jahr	End of stay, year and month
MOVE	Zuzug DE, anderes Land oder Geburtsland	Migration Germany, other country or birth country
COUNTRY	Aufenthaltsland, detailliert	Residence country, detailed information
STATUS	Zuzugsart DE und anderes Land	Migration to Germany and other countries under which way
OSTATUS	Andere Zuzugsart DE und anderes Land	Migration to Germany and other countries under which other way
STATUSDE	Zuzugsart Deutschland	Migration to Germany under which way
OSTATUSDE	Andere Zuzugsart DE	Migration to Germany under which other way
LFGROUP	Zuzug nach Deutschland - Erwerbstätigen	Migration to Germany - Employed
STATUSOC	Zuzugsart, anderes Land	Migration to another country under which way
OSTATUSOC	Andere Zuzugsart, anderes Land	Migration to another country under which other way
STAYTIME	Länge des Aufenthalts in Monaten	Length of stay in months
SUPPORT	Unterstützung bei Zuzug nach DE	Support at migration to Germany
LASTMIG	Jahr des letzten Zuzugs nach Deutschland	Year of the last migration to Germany
CENSOR	Zensor-Variable	Censoring variable
IMPUT	Imputationszeiger	Imputation flag
SYEAR	Surveyjahr	Survey year

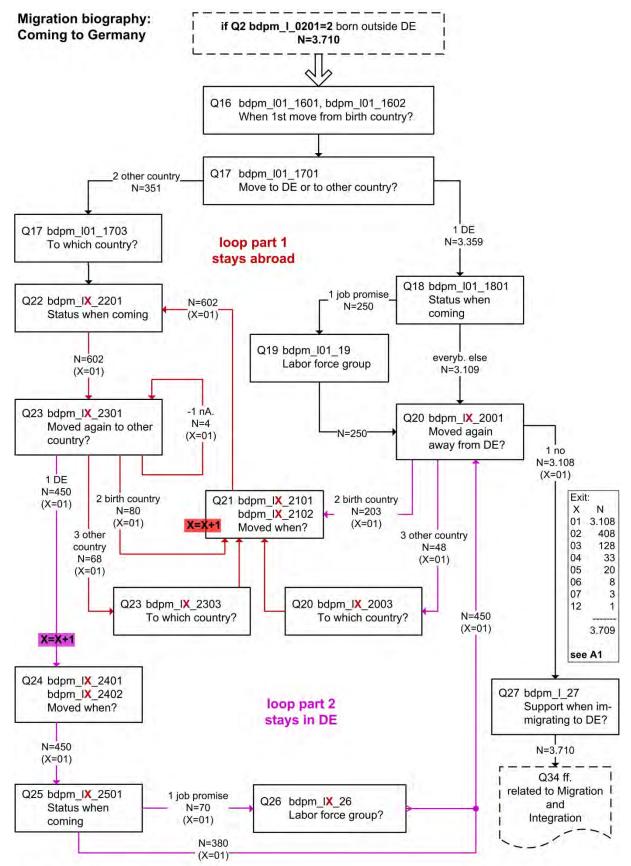


Figure 1: Flow chart of the "Coming to Germany"-part of the migration biography

Flowchart: Klaudia Erhardt, SOEP, DIW 2014

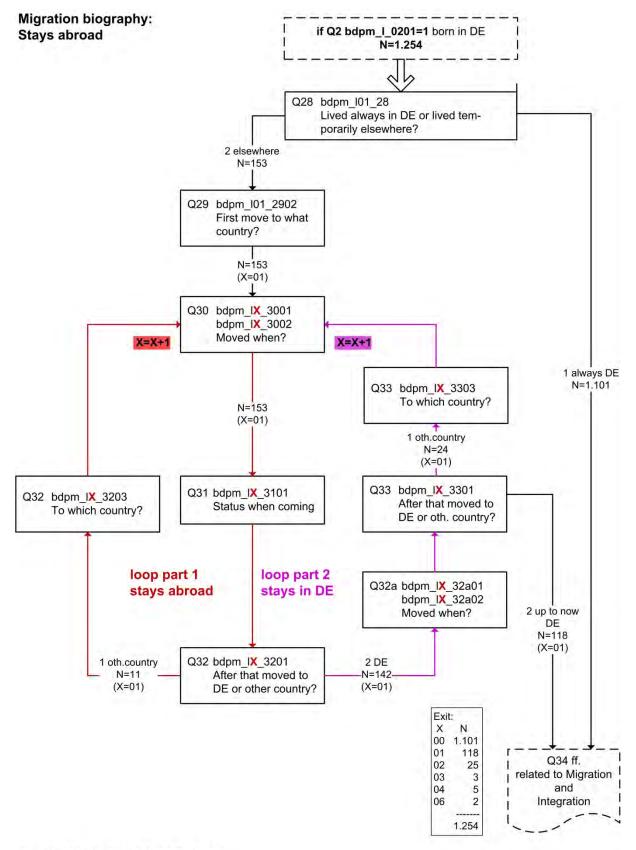


Figure 2: Flow chart of the "Stays abroad"-part of the migration biography

Flowchart: Klaudia Erhardt, SOEP, DIW 2014

3.3 Using this File

The usual matching variable, persnr (Person Number), is included in the data file. The data is sorted by HHNR, PERSNR and MIGNR.

PERSNR	MIGFILTER	MIGNR	START	END	COUNTRY
101	1	0	1974, Jan	1982, Oct	Germany
101	1	1	1982, Nov	1990, Feb	Spain
101	1	2	1990, Mar	2009, Mar	Turkey
101	1	3	2009, Apr	2013, Jul	Germany
102	2	0	1985, Nov	1993, Aug	Poland
102	2	1	1993 <i>,</i> Sep	1996, Jan	France
102	2	2	1996, Feb	2013, Jul	Germany
103	1	0	1981, Mar	2013, Jul	Germany

Table 2: Data structure (fictitious data)

As one can see above, every person has one, two or more observations depending on the number of stays in different countries. The variable START for the first spell informs about the birth year and month of the respondent, for the following spells, it informs about the year and month in which the respondent arrived in the specific country (COUNTRY). In the spell number 0 (MIGNR), the variable COUNTRY takes the value of the variable BCOUNTRY, i.e. the country of birth. The variable END indicates the year and month in which the person left this country. For every stay the variables STATUS/OSTATUS indicate in which framework the person came to the country in question. Additionally to these variables and according to the questionnaire, the dataset contains four other variables on the migration framework depending on whether the respondent moved to Germany (STATUSDE and OSTATUSDE) or to another country (STATUSOC and OSTATUSOC). The variables OSTATUS, OSTATUSDE and OSTATUSOC were generated because the respondent had the possibility to give another reason for migrating in a free text field. Some of those free text answers could be categorized into the existing categories of STATUS, STATUSDE and STATUSOC. But most of them were categorized into the newly generated variables OSTATUS/OSTATUSDE/OSTATUSOC, also for data protection reasons.

Users also can easily convert the file into a long-format file using months (person x months). This is an example of STATA coding for this purpose:

use migspell.dta, clear

```
expand staytime
bysort persnr mignr: gen n=_n
gen month=start+n-1
replace month=-3 if startmo==-3
move month start
lab val month mon_1900
label def staytime -3 "Nicht valide", modify
save "newfile.dta", replace
Imputation of missing values
```

	•	
max1	Freq.	Percent
0	4,790	96.49
1	158	3.18
2	13	0.26
3	1	0.02
5	1	0.02
10	1	0.02
Total	4,964	100.00

Table 3: Number of missing values on the variable STARTMO

The missing values were imputed according to rules that are exposed in the following section.

1. If two consecutive years have different values and STARTMO has one missing value on one of those years, the missing value is replaced by the value corresponding to the month July (value 7). 165 missing values were imputed according to this rule.

MIGNR	STARTY	STARTMO	STARTMI
0	1973	9	9
1	1994	8	8
2	1999	-1	7
3	2001	2	2

 If only two consecutive years have the same value and STARTMO is missing on the second spell of this year, the missing value was replaced by the value corresponding to the middle of the interval between the last move and December:

```
startmi = startmo[_n-1] + round((12-startmi[_n-1])/2)
```

Three Missing values were imputed according to this rule.

MIGNR	STARTY	STARTMO	STARTMI
0	1973	9	9
1	1994	8	8
2	1994	-1	10

Thereby, it is possible that cases are generated for which the length of stay is shorter than three months.

3. If two consecutive years are the same and the value for the month is missing on the first spell of this year, the missing value was replaced by the value corresponding to the middle of the interval between the beginning of the year and the month of the subsequent move:

startmi = round(startmo[_n+1] -1)/2

MIGNR	STARTY	STARTMO	STARTMI
0	1973	9	9
1	1994	-1	4
2	1994	8	8

Thereby, it is possible that cases are generated for which the length of stay is shorter than three months.

4. If the birth month is missing, the missing value was replaced by the value 7

MIGNR	STARTY	STARTMO	STARTMI
0	1973	-1	7
1	1994	8	8

3.4 Variables

Below, each variable is listed and its variable and value labels are displayed in both English and German. A list of the main source variables used in the generation is provided for reference purposes.

MIGNR	Spellnummer
	Spell number

Comment: This variable indicates the spell number of the observation for each person. The first spell has the value 0 because it does not correspond to a migration episode but to the stay in the country of birth.

MIGFILTER	Population Population
Question:	Q2
Comment:	This variable is included because respondents born abroad and respondents born in Germany do not answer the same questions in the same loop in the questionnaire. It allows users to select rapidly the population
German:	Wo liegt ihr Geburtsort heute: in Deutschland oder außerhalb Deutschlands?
	"[1] In Deutschland Geborene"
	"[2] Im Ausland Geborene"
English:	Where is your birth place located today: in Germany or outside of Germany?
	"[1] In Germany"
	"[2] Outside of Germany"

NSPELLS	Anzahl der Spells pro Person
	Total number of spells per person
Comment:	This variable indicates the total number of spells for each person
BCOUNTRY	Geburtsland Country of birth
Question:	Q2
German:	Wo liegt ihr Geburtsort heute: in Deutschland oder außerhalb Deutschlands?
	"[1] In Deutschland"
	"[2] Außerhalb Deutschlands und zwar:"
English:	Where is your birth place located today: in Germany or outside of Germany?
	"[1] In Germany"
	"[2] Outside of Germany. Please state:"

STARTY	Jahr des Wegzugs	
	Year of migration	
Question:	Population born outside of Germany: Q16, Q21 and Q24	
	Population born in Germany: Q30 and Q32a	
Variable used:	See Flow Charts 1 and 2	
Comment:	As the migration dates where prompted in different loops for each	
	population, the X in the variable names denotes the number of the	
	applicable loop.	
	If one person has two consecutive equal migration dates (same year and month), users can show them using the following STATA code:	
	browse persnr if starty[_n+1]==starty[_n] &	
	<pre>startmi[_n+1]</pre>	
	==startmi[_n] & persnr[_n+1]==persnr[_n]	

STARTMO	Monat des Zuzugs	
	Month of migration	
Question:	Q16, Q21, Q24, Q30 and Q32a	
Variables used:	bdpm_pX_1602, bdpm_pX_2102, bdpm_pX_2402, bdpm_p_X_3002 and bdpm_pX_32a02	
See also:	STARTY	
STARTMI	Monat des Wegzugs, imputiert	
	Month of migration, imputed	
Comment:	For the imputation rules see above	
START	Beginn des Aufenthalts, Jahr und Monat	
	Begin of stay, year and month	
Comment:	This variable was generated by combining STARTY and STARTMO.	
See also:	STARTY, STARTMO	

END	Ende des Aufenthalts, Jahr und Monat	
	End of stay, year and month	
Comment:	This variable was generated by subtracting one month from START.	
See also:	START	
MOVE	Zuzug nach Deutschland, in das Geburtsland oder ein anderes Land Migration to country of origin, Germany or another country	
Question:	Population born outside of Germany: Q17, Q20 and Q23 Population born in Germany: Q28, Q32 and Q33	
Variables used:	bdpm_pX_1701, bdpm_pX_2001, bdpm_pX_2301 bdpm_pX_2801, bdpm_pX_3201, bdpm_pX_3301	

COUNTRY	Zuzug in welches Land, detailliert	
	Migration to which country, in detail	
Question:	Population born outside of Germany: Q17, Q20 and Q23	
	Population born in Germany: Q28, Q32 and Q33	
Variables used:	bdpm_pX_1702, bdpm_pX_2002, bdpm_pX_2302	
	bdpm_pX_2802, bdpm_pX_3202, bdpm_pX_3302	
Comment:	There are some rare cases where two following spells indicate the	
	same country. This is due to the grouping of two regions, e.g. La	
	réunion was assigned later to France. Those cases can be shown using	
	the following STATA code:	
	<pre>browse if (country==country[_n+1] & persnr==persnr[_n+1])</pre>	
	(country==country[_n-1] & persnr==persnr[_n-1])	

STATUS	Zuzug nach Deutschland oder in ein anderes Land, auf welchem Weg
	Migration to Germany or to another country, under which way
Comment:	This variable bundles the information from STATUSDE and STATUSOC
German:	Auf welchem Weg sind Sie nach Deutschland gekommen?
	"[1] Erwerbstaetiger mit Jobzusage"
	"[2] Aussiedler"
	"[3] Ehegatte/Kind/Familienangeh."
	"[4] Asylbewerber/Fluechtling"
	"[5] Student/Schueler/Azubi"
	"[6] Arbeit suchend"
	"[7] Sonstiger Status"
	"[8] Deutscher, im Ausl. aufgewachsen (nur 2014)"
	"[9] Touristenvisum (nur 2014)"
English:	How did you move to Germany?
	"[1] As an employed person who already had a job offer"
	"[2] As an ethnic German (Aussiedler) from an Eastern European country"
	"[3] As a spouse, child or other family member"
	"[4] As an asylum-seeker or refugee"
	"[5] As a student or vocational trainee"
	"[6] As a job-seeker"
	"[7] In a different way"
	"[8] German, born abroad (2014 only)"
	"[9] Tourist visa (2014 only)"

OSTATUS	Zuzug nach Deutschland oder in ein anderes Land, anderer Weg Migration to Germany or to another country, other way
Comment:	This variable bundles the information from OSTATUSDE and OSTATUSOC
Comment:	The variable contains a categorization of free text answers given if the variable STATUS equal "[7] In a different way".

STATUSDE	Zuzug nach Deutschland auf welchem Weg	
	Migration to Germany under which way	
Question:	Population born outside of Germany: Q18 and Q25	
German:	Auf welchem Weg sind Sie nach Deutschland gekommen?	
	"[1] Erwerbstaetiger mit Jobzusage"	
	"[2] Aussiedler"	
	"[3] Ehegatte/Kind/Familienangeh."	
	"[4] Asylbewerber/Fluechtling"	
	"[5] Student/Schueler/Azubi"	
	"[6] Arbeit suchend"	
	"[7] Sonstiger Status"	
	"[8] Deutscher, im Ausl. aufgewachsen (nur 2014)"	
	"[9] Touristenvisum (nur 2014)"	
English:	How did you move to Germany?	
	"[1] As an employed person who already had a job offer"	
	"[2] As an ethnic German (Aussiedler) from an Eastern European country"	
	"[3] As a spouse, child or other family member"	
	"[4] As an asylum-seeker or refugee"	
	"[5] As a student or vocational trainee"	
	"[6] As a job-seeker"	
	"[7] In a different way"	
	"[8] German, born abroad (2014 only)"	
	"[9] Tourist visa (2014 only)"	

Comment: The way under which migrants came to Germany are only available for persons born outside of Germany. Even if a person born in Germany spent some time abroad, the way under which she returned to Germany are not known.

OSTATUSDE	Zuzug nach Deutschland auf welchem anderen Weg	
	Migration to Germany under which other way	
Question:	Population born outside of Germany: Q18 and Q25	
Comment:	The variable contains a categorization of free text answers given if the	
	variable STATUSDE equal "[7] In a different way".	
See also:	STATUSDE	

LFGROUP	Zuzug nach Deutschland - Erwerbstätigen	
	Migration to Germany – employed	
Question:	Population born outside of Germany: Q19 and Q26	
German:	Als Sie als Erwerbstätiger nach Deutschland kamen, zu welcher Gruppe gehörten sie da?	
	"[1] Selbstaendige/Unternehmer"	
	"[2] Saisonarbeiter/Werkvertragsarbeitsnehmer"	
	"[3] Innerh. d. Unternehmens n. DE versetzt"	
	"[4] Vom Unternehmen f. Taetigkeit n DE entsendet"	
	"[5] Hochqualifizierte m. erleicht. Einreisebed."	
	"[6] Andere Arbeitnehmer"	
	"[7] Praktikant (nur 2014)"	
	"[8] Au Pair (nur 2014)"	
	"[9] Arbeitssuchend (nur 2014)"	
English:	When you moved to Germany as a job-seeker, what group did you belong to?	
	"[1] Self-employed / entrepreneur"	
	"[2] Seasonal laborer / contractor"	
	"[3] I was relocated to Germany by my employer"	
	"[4] I was sent to Germany by my employer in my home country to carry out a task"	
	"[5] Highly skilled worker / scientist / other specialist subject to special conditions for facilitated entry"	
	"[6] Other employee"	
	"[7] Intern (2014 only)"	
	"[8] Au Pair (2014 only)"	
	"[9] Seeking employment (2014 only)"	

Comment: The way under which working migrants came to Germany are only available for persons born outside of Germany. Even if a person born in Germany spent some time abroad, the way under which she returned as a working person to Germany are not known.

STATUSOC	Zuzug in ein anderes Land auf welchem Weg Migration to another country under which way
Question:	Population born outside of Germany: Q22
	Population born in Germany: Q31
German:	Auf welchem Weg sind Sie in das andere Land gezogen?
	"[1] Erwerbstaetiger mit Jobzusage"
	"[3] Ehegatte/Kind/Familienangeh."
	"[4] Asylbewerber/Fluechtling"*
	"[5] Student/Schueler/Azubi"
	"[6] Arbeit suchend"
	"[7] Sonstiger Status"
English:	How did you move to the other country?
	"[1] As an employed person who already had a job offer"
	"[3] As a spouse, child or other family member"
	"[4] As an asylum-seeker or refugee"*
	"[5] As a student or vocational trainee"
	"[6] As a job-seeker"
	"[7] In a different way"
Comment:	*The option "[4] As an asylum-seeker or refugee" is only proposed for the population born outside of Germany.

OSTATUSOC	Zuzug in ein anderes Land auf welchem anderen Weg	
	Migration to another country under which other way	
Question:	Population born outside of Germany: Q22	
	Population born in Germany: Q31	
Comment:	The variable contains a categorization of free text answers given if the	
	variable STATUSOC equal "[7] In a different way".	
See also:	STATUSOC	

CENSOR	Zensor-Variable
	Censor variable

See also:	STARTMI
Comment:	Indicates spells where a missing month was imputed. See above concerning the imputation rules
	Imputation flag
IMPUT	Imputationszeiger

SUPPORT	Unterstützung bei Zuzug nach Deutschland
	Support when migrating to Germany
Question:	Population born outside of Germany: Q27
German:	Als Sie nach Deutschland gezogen sind, hatten Sie da Unterstützung von Freunden oder Verwandten, die bereits in Deutschland lebten?
	"[1] Ja, von Verwandten"
	"[2] Ja, von Freunden"
	"[3] Ja, beides"
	"[4] Nein"
English:	When you moved to Germany, did you have the help of any relatives or friends who already lived in Germany?
	"[1] Yes, relatives"
	"[2] Yes, friends"
	"[3] Yes, both"
	"[4] No"
Comment:	Only the population born outside of Germany was asked this question.
	If the person moved more than once to Germany, she should refer to the most recent move.

LASTMIG	Jahr des letzten Zuzugs nach Deutschland						
	Year of the last migration to Germany						
Comment:	This variable contains the start date of the last spell of each person.						
See also:	MIGNR, STARTY						
SYEAR	Surveyjahr						
	Surveyyear						
Comment:	This variable had not been included in the 2013 edition of migspell.						

4 Activity Biography in the Files PBIOSPE and ARTKALEN

by Paul Schmelzer and Maik Hamjediers¹

The spell file PBIOSPE is based on the information on activity status over the life course, which is collected as a matrix from every respondent answering the Biography Questionnaire (Question 43 in 2014).² The observations start at the age of 15 and end at the current age (up to age 65). This information on activity status covers only the period up to the time the biography is collected. To update the ongoing occupational career in PBIOSPE, information from the yearly Individual Questionnaire is also used. In this questionnaire, respondents are always asked their occupational status for every month of the previous year (Question 84 in 2014).³ Therefore, the information on activity status collected on a monthly basis in the yearly personal questionaire and stored in the file ARTKALEN in spell format is aggregated into yearly values and combined with the information gathered from the Biography Questionnaire.⁴

In the following, the method of combining the data is described. There have been no changes how the data is generated since the previous version, distributed in 2014. But if you have been working with older versions of the dataset (versions distributed in 2008 and earlier) you should check the section at the end of the chapter, where you will find information on previous changes. But before we move on to the details, we provide a brief overview of the contents of PBIOSPE. Table 1 contains a list of all the variables in the dataset. The variables BEGIN and END indicate the beginning and the end of a spell. These variables are age entries. There are also variables that refer to calendar years: BEGINY and ENDY (Y stands for Year). The variable SPELLTYP contains information on the activity status during the spell, e.g., employed full-time or unemployed. The SPELLNR is a serial identifier of spells of each activity status of a given person. Missing information on the beginning or end of a spell causes what are known as censoring problems. There are two types of missing data. First, data can be missing on periods outside the observation window (before the age of 15 and after the age of 65). Second, data can be missing on years within the observation window due to item non-response in particular years or due to temporary drop-outs (the latter applies to calendar information only). In this case, we speak of "gaps." There are nine different patterns⁵ (see Table 1).

³ For persons who were temporarily unavailable for interviewing, it is sometimes possible to fill in the gaps in their occupational status. If these persons fill out the additional questionnaire for temporary drop-outs later on, we can use the information collected there (see files \$PLUECKE).

⁴ For more information, see Chapter 1.

¹ Based on earlier work by Rainer Pischner, Henning Lohmann, Marco Giesselmann, and Mila Staneva.

² See Chapter 1 for general information on the collection of biography information.

⁵ The same goes for the ZENSOR-variable in ARTKALEN.

Table 1: Coding of the variable ZENSOR

Right: Left:	not censored	censored missing	censored before gap
not censored	1	2	3
censored missing	4	5	6
censored after gap	7	8	9

Note: '(99) Gap' spells are all markes as (-2)

Variable	Description
HHNR	Original Household Number
PERSNR	Never Changing Person ID
SPELLNR	Serial Number Of The Spell Per Person
SPELLTYP	Type Of Spell
BEGIN	Age Spell Begins
END	Age Spell Ends
BEGINY	Year Spell Begins
ENDY	Year Spell Ends
ZENSOR	Censor Variable
SPELLINF	Spell Construction Information
ERHEBJ	Survey Year Biography Data
KALYEAR	First Observation Year Calendar
BEGINB1	Age Spell Begins, 1st Initial Biography Spell
ENDB1	Age Spell Ends, 1st Initial Biography Spell
BEGINK1	Age Spell Begins, 1st Initial Calendar Spell
ENDK1	Age Spell Ends, 1st Initial Calendar Spell
BEGINYB1	Year Spell Begins, 1st Initial Biography Spell
ENDYB1	Year Spell Ends, 1st Initial Biography Spell
BEGINYK1	Year Spell Begins, 1st Initial Calendar Spell
ENDYK1	Year Spell Ends, 1st Initial Calendar Spell
BEGINB2	Age Spell Begins, 2nd Initial Biography Spell
ENDB2	Age Spell Ends, 2nd Initial Biography Spell
BEGINK2	Age Spell Begins, 2nd Initial Calendar Spell
ENDK2	Age Spell Ends, 2nd Initial Calendar Spell
BEGINYB2	Year Spell Begins, 2nd Initial Biography Spell
ENDYB2	Year Spell Ends, 2nd Initial Biography Spell
BEGINYK2	Year Spell Begins, 2nd Initial Calendar Spell
ENDYK2	Year Spell Ends, 2nd Initial Calendar Spell
BEGINB3	Age Spell Begins, 3rd Initial Biography Spell
ENDB3	Age Spell Ends, 3rd Initial Biography Spell
BEGINK3	Age Spell Begins, 3rd Initial Calendar Spell
ENDK3	Age Spell Ends, 3rd Initial Calendar Spell
BEGINYB3	Year Spell Begins, 3rd Initial Biography Spell
ENDYB3	Year Spell Ends, 3rd Initial Biography Spell
BEGINYK3	Year Spell Begins, 3rd Initial Calendar Spell
ENDYK3	Year Spell Ends, 3rd Initial Calendar Spell
BEGINK4	Year Spell Begins, 4th Initial Biography Spell
ENDK4	Year Spell Ends, 4th Initial Biography Spell
BEGINYK4	Year Spell Begins, 4th Initial Calendar Spell
ENDYK4	Year Spell Ends, 4th Initial Calendar Spell

Table 2: Contents of PBIOSPE (variables)

As mentioned above, PBIOSPE combines information collected in the biography questionnaire and the calendar matrix of the individual questionnaire. The two types of information are merged into PBIOSPE following a number of rules. First of all, it is important to acknowledge that the Biography Questionnaire Matrix as well as the Individual Questionnaire Matrix allow for multiple activity statuses for a given year or month. No concept of main activity is used. A common combination is, for instance, "housewife/husband" and "working part-time". There are a number of other plausible combinations, but also combinations that are less plausible. However, a list of valid combinations of activity

statuses defined according to legal or similar constructs would need to be based on very strong assumptions. In addition—in particular in case of the yearly matrix in the Biography Questionnaire—activities are reported that took place in a calendar year in consecutive months, which makes it impossible to exclude combinations of activities. Therefore, no data cleaning is performed at this stage. As a consequence, the data may contain information on more than one activity for a given point in time.

This also defines the rules for aggregating the monthly ARTKALEN data into yearly values. Take, for example, a person who was in full-time employment from January to November 2007, and unemployed in December 2007. The exact months are recorded in the dataset ARTKALEN. In the aggregated data, which is merged with the yearly data from the Biography Questionnaire, you find the information that the person worked full-time and was also unemployed in the year 2007. There is a second level of aggregation of ARTKALEN information as the data on type of activity, which is recorded in the variable SPELLTYP is more detailed than in PBIOSPE. The respective information is aggregated as described in Table 3.

	PBIOSPE	ARTKALEN
1	School/University	School, College (1)
2	Apprenticeship/Training	Vocational Training (4), First Job Training,
		Apprenticeship (13), Continuing Education, Retraining
		(14)
3	Military/Civilian service	Military, Community Service (9)
4	Full-time employed	Full-Time Employment (1), Short Work Hrs (2)
5	Part-time employed	Part-Time Employment (3), Second Job (11), Mini-job
		(up to 400 euros) (15)
6	Unemployed	Unemployed (5)
7	House-Husband/Wife	Housewife, Husband (10)
8	Retired	Retired (6)
9	Other	Maternity Leave (7), Other (12)
99	Gap	Information on gaps in ARTKALEN is not used. Gaps are
		calculated on the basis of the merged dataset.

Table 3: Aggregation of ARTKALEN spell information into PBIOSPE

As stated above, the calendar information is used to update the biography information. However, there is also a certain overlap of the periods covered by the two types of data. This is shown in Table 4. It indicates, for persons included in PBIOSPE, the year in which the biography information was collected (variable ERHEBJ). This year is usually also the last year for which biography information is available.⁶. The table also shows the first year recorded in the calendar data (variable KALYEAR).

⁶ Please note that some biographies were collected in 2011 although they are part of Wave 27. This results from the fact that some members of Sample I were interviewed in early 2011 instead of 2010.

Table 4:

Overlap between biography and calendar information

First observation in ARTKALEN (compared to erhebj*)										
	earlier same year									
erhebj*	or later %	1 year %	2 years %	3 years %	4+ years %	Total n				
198	4 0.1	100.0	0.0	0.0	0.0	11,001				
198	7 0.0	36.4	33.5	30.1	0.0	505				
198	8 0.0	100.0	0.0	0.0	0.0	164				
198	9 0.5	99.5	0.0	0.0	0.0	193				
199	0.0	100.0	0.0	0.0	0.0	180				
199	1 0.0	100.0	0.0	0.0	0.0	157				
199	2 0.0	8.4	3.6	88.0	0.0	3,930				
199	3 0.0	76.6	0.3	2.3	20.7	304				
199	4 0.2	98.3	0.3	0.2	1.0	91				
199	5 0.2	99.1	0.0	0.1	0.6	1,03				
199	6 0.2	97.9	0.0	0.0	1.9	48				
199	7 0.0	98.5	0.0	0.0	1.5	47				
199	8 0.7	98.1	0.0	0.2	1.0	41				
199	9 0.1	26.6	72.8	0.0	0.5	1,82				
200	0.0	90.2	0.9	7.7	1.3	23				
200	1 0.0	6.3	93.6	0.0	0.0	7,52				
200	2 0.2	48.1	0.4	39.0	12.4	52				
200	3 0.1	16.9	81.3	0.1	1.6	2,19				
200	4 0.0	68.8	4.2	20.1	6.9	43				
200	5 0.0	89.0	3.4	0.7	6.9	29				
200	6 0.0	92.2	4.2	0.0	3.7	21				
200	7 0.0	16.2	83.4	0.1	0.3	1,85				
200	8 0.0	68.9	2.9	26.9	1.3	30				
200	9 0.0	89.5	2.1	0.5	7.9	19				
201	0 4.1	79.2	16.7	0.0	0.0	7,88				
201	1 2.5	91.7	5.7	0.0	0.0	5,67				
201	2 3.9	95.6	0.3	0.2	0.1	2,20				
201	3 92.3	7.4	0.2	0.1	0.0	3,69				
201	4 0.0	98.5	1.2	0.0	0.4	26				
otal	7.2	60.0	25.0	7.3	0.6	55,08				

First observation in ARTKALEN (compared to erhebj*)

Notes: *) Year of biography data collection (variable ERHEBJ). Source: SOEP v31, doi: 10.5684/soep.v31 (PBIOSPE).

In the majority of cases (60 percent), the earliest calendar information is available for the year before the biography interview. This is the case for persons who answered the Biography Questionnaire in their first year as survey respondents. The calendar in the Individual Questionnaire refers to the year before the survey. There are, however, changes over time. In 1998, it was decided that first-time respondents from new samples would not be given the

Biography Questionnaire in the first wave but in the second in order to reduce the entry threshold for these new respondents. Consequently, for the majority of persons in years after new samples were integrated (1999, 2001, 2003, 2007, 2010/11 - Samples E to I), the earliest calendar information is available two years before the biography information was collected. This was once again changed in 2011 and in 2013: respondents from samples J and K were given both questionnaires in their first year in SOEP and 2013 the sample M was introduced via a special Biography Questionnaire about individual migration histories without surveying the calendar data. The same applies to first-time respondents who are members of an old sample (e.g., persons who moved into a panel household) - they answer the Biography Questionnaire at the time of their first interview. The pattern is quite stable for most years before 1999. Notable exceptions is the year 1992. This is explained by the integration of East Germany into the SOEP in 1990 (Sample C). The majority of the respondents in these samples answered just the Biography Questionnaire at the entrance into the SOEP. Another exception is the year 1987. In the years 1985 to 1987, the life course matrix was not part of any of the questionnaires. Therefore the respective biography information was only available for persons who were interviewed in 1984. In 1988, biographic information was also collected for persons who became respondents in 1985, 1986, and 1987 (for all years ERHEBJ=1987). In addition There are even some cases (0.6 percent = 304 cases) where the biography information was collected a long time after the person started to respond to the Individual Questionnaire (up to 22 years). These are respondents who failed to answer to the Biography Questionnaire at a given time and therefore the biography information was collected later. In these—albeit very rare—cases, there is substantial overlap between the periods covered by the calendar and biography information.

	n	%	% cum.
biography only	204,332	51.9	51.9
calendar only	124,934	31.7	83.7
1 biography, 1 calendar spell	62,677	15.9	99.6
2+ biography, 1 calendar spell(s)	580	0.2	99.7
1 biography, 2+ calendar spell(s)	1,047	0.3	100.0
2+ biography, 2+ calendar spell(s)	35	0.0	100.0
Total	393,605	100.0	

Table 5: Sources of PBIOSPE spells

Source: SOEP v31, doi: 10.5684/soep.v31 (PBIOSPE).

After merging the information from the Biography Questionnaire and ARTKALEN, the data is transformed into spells, whereby each spell is defined by the duration of a given status. A question that arises when merging the data is how to handle overlapping pieces of information. The basic principle is to assign a value of a given status in a given year if the status is recorded in the calendar or in the biography information or both. An example might help to illustrate this: the calendar records full-time employment for the years 2005 and 2007 while the biography records full-time employment for the period from 2000 up to 2006. The merged data from PBIOSPE contains a spell that begins in 2000 and ends in 2007. However, the initial information is restored by including additional variables, which allows for alternative ways of merging the data (see below). The variables SPELLINF, ERHEBJ, and KALYEAR contain general information on the sources of the information captured in a given spell. Table 5 shows that the majority of spells are based on biography information only (51.9 percent). Slightly less than one-third of all spells (31.7 percent) are not observed in the Biography Questionnaire but only in the calendar data. The remainder of spells contain information from biography as well as calendar data. Usually these spells combine one period observed in the Biography Questionnaire with a period observed in the calendar. Only 0.4 percent of the spells combine more than one period in any of the two sources (SPELLINF=4, 5 or 6).

The variables BEGINB1-ENDYK4 document the initial information from the two different sources and are probably not of interest to the majority of users. However, on the basis of these variables, users are able to fully separate the Biography data from the aggregated ARTKALEN data. This is advisable if you want to use the more detailed ARTKALEN information and combine it with the yearly information from PBIOSPE for earlier years only. The variable names indicate the "source" of the original information utilized (B: Biography -Questionnaire or K: calendar information from the yearly survey). As an example, we discuss one of the spells that combines information on more than one period from any of the two sources. The spell number 4 of person 9205 starts in 1983 and ends in 1994 (SPELLTYP=4: full-time employment). As the variable SPELLINF (=5) shows, this a spell that combines one period from the biography data with two periods from the calendar data. According to the biography data, the person worked full-time from 1983 (BEGINYB1) until 1992 (ENDYB1). There is overlapping information from the calendar data available from 1986 onwards (KALYEAR). According to these data, the person worked full-time from 1986 (BEGINYK1) to 1990 (ENDYK1) and from 1993 (BEGINYK2) to 1994 (ENDYK2). During the years 1991 and 1992, no full-time employment is recorded in the calendar data, which contradicts the information from the biography data.

Table 6: Example of combined spell

р	ersnr	spellnr	spelltyp	beginy	endy	spellinf	erhebj	kalyear	beginyb1	endyb1	beginyk1	endyk1	beginyk2	endyk2
_ [9205	4	4	1983	1994	5	1998	1986	1983	1992	1986	1990	1993	1994

Source: SOEP v31 (PBIOSPE).

In PBIOSPE, no attempt is made to "resolve" such contradictions, as this would require rather strong assumptions. More important, such assumptions would differ according to the research question, which makes it even more difficult to provide a standard solution. Therefore, in such cases, we generate spells in the same manner as in less difficult cases, namely by combining the information from the calendar and the biography data. In the given example, this results in a full-time employment spell that starts in 1983 and ends in 1994. As mentioned above, there are very few spells that combine information on two or more periods (SPELLINF=4, 5, 6, less than 0.4 percent of all spells). There are even fewer such spells where the period of overlap is as long as in this example, where the biography data was collected many years after the persons joined the survey (ERHEBJ=1998, KALYEAR=1986). However, users who are interested in combining biography and calendar data in a different manner can use the variables BEGINB1-ENDYK4 to fully separate the two types of data and to recombine the data on the basis of different rules of aggregation.

Changes in the previous version of PBIOSPE (release 2009):

The description in this chapter refers to the version of PBIOSPE released in 2014 (waves 1-30). There have been no changes how the data is generated since the previous version, distributed since 2009. But users who are only familiar with older versions of PBIOSPE (releases 2008 and earlier) will observe some differences. In 2009, the data generation has been updated completely, but without changing the basic principles. Therefore, there are only a few barely discernible deviations in the main variables (due to slight changes in the consistency checks of the data). But there are a number of visible changes in the form of additional variables or additional values in already existing variables:

- documentation of censoring:
 - o gaps in the data are recorded as spells (SPELLTYP=99)
 - the variable ZENSOR is more detailed and informs about the type of censoring (end of observation window, gap due to missing data)
- documentation of set-up of single spells:
 - new variable KALYEAR: contains the first year for which calendar information is available
 - new variables BEGINB1-3, ENDB1-3, BEGINYB1-3, ENDYB1-3, BEGINK1-4, ENDK1-4, BEGINYK1-4, ENDYK1-4 (these variables replace BEGINBIO, ENDBIO, BEGINYB, ENDYB, BEGINKAL, ENDKAL, BEGINYK, ENDYK): Like the replaced variables, these variables document

the original calendar and biography data. The new variables have been added to have a full documentation also for spells in which three or more initial spells are merged (spells with SPELLINF>=4). For the large majority of spells (SPELLINF<=3) only the first of each set of variables is filled. The new variables can be used to separate biography and calendar data, e.g., if you want to combine on your own biography data with data from ARTKALEN.

- additional value in variable SPELLINF: the value 6 indicates that a spell has been constructed out of 2 or more biography and 2 or more calendar spells
- additional changes:
 - variable ERHEBJ: value -2 if no biography information for a person is available (old version: value 0)
 - The variable FEHLCODE is no longer provided, as its values appeared to be more confusing than helpful. It contained information on data problems in the biographies collected in 1984 only. Information on gaps and overlaps is now documented for all years but not in a single variable.
 - variable SPELLTYP: value 3 indicates part-time and marginal employment until 2004. In 2005 a separate category for marginal employment (also "minijob" or "400-euro job") is introduced (value 15) and value 3 is restricted only to part-time employment.

5 BIOJOB: Detailed Information on First and Last Job

by Paul Schmelzer and Tobias Wolfram¹

5.1 Overview

Biographical data in the GSOEP stem from various sources. All information for the waves 1984 to 1995 is compiled in the BIOLELA-file of the SIR-GSOEP-database. Since 1996 a standardised version for all samples has been provided, and new biographical data is stored in wave-specific files (\$LELA). To have a general phrasing, all biographical files are referred to as LELA-files. (LELA stems from the German 'LEbensLAuf', curriculum vitae.)

The LELA-data relevant for BIOJOB consists of

- the age at entry into the working force
- the type of occupation at entry (blue/white collar worker, self-employed, civil servant)
- detailed occupational information at entry
- changes of occupation
- intended educational degree or vocational/professional training
- the year of the last employment
- the type of occupation in the last job.

Since 2000 a new questionnaire (in the following referred to as Youth Questionnaire) has been provided for respondents who are 16 or 17 years old. The youth respondents answer the Youth Questionnaire instead of the biographical one. The Youth Questionnaire provides less detailed information about the job biography because respondents usually have not entered the labour market at the age of 16 or 17.

In 2001 members of the F sample became part of the biojob population. They had to answer the biography questionnaire if their year of birth was prior to 1982. Members of the F sample with a birth year in the range from 1982 to 1984 answered the Youth Questionnaire.

Members of sample G (2002) answered the biography questionnaire in 2003, Persons who where born between 1986 and 1987 answered the Youth Questionnaire.

Members of sample H (2006) answered the biography questionnaire first time in 2007 and therefore are part of the BIOJOB population.

Sample I has been moved to the SOEP-Innovation study and, since 2011 (wave 28/BB), are no longer part of the core SOEP population. Members of sample I are still part of the BIOJOB population until 2010.

¹ Based on work of Tanja Schmidt, Anita Kottwitz, Daniel Wachtlin, Mathis Schroeder, Thorsten Schneider; and Hansjoerg Haas (Update waves X/Y/Z/BA/BB/BC/BD (2007-2013)).

Since 2006 respondents who are 16 or 17 years old filled in a youth questionnaire instead of the standard Individual Questionnaire, which provides less detailed information about the current job.

Recently two new projects were integrated into BIOJOB: The IAB-SOEP migration sample M (2013) and the "Familien in Deutschland" (L1-L3) data which was incorporated into the GSOEP in 2015 and is for the first time available with the distribution of wave BE.

The purpose of BIOJOB is to provide a file, that offers the user convenient access to biographical information on past job activities. Up to now all but two variables of BIOJOB are time-invariant. Information on occupational changes and on the age at the most recent change of occupation refer to the date of the respondent's biography interview.

5.2 Structure and Contents of BIOJOB

BIOJOB consists of generated variables as well as plain questionnaire information. In this section the generated variables are explained and their coding is illustrated.

Concerning different sources of information, the following priority scheme is applied: First the plain information stemming directly from questions on the relevant topic in the latest valid LELA-file is used. In case of inconsistencies, which will be explained later on, the latest valid information stemming from the PBIOSPE file is also used. The PBIOSPE file consists of spell data concerning the retrospective question 'what did you do since the age of 15' in the Biography Questionnaire as well as the question on activities in the last year in the Individual Questionnaire (for detailed information see chapter 3).

Contents of BIOJOB

Population: All persons with an entry in any LELA-/YOUTH-file up to 2014, even if information on employment is missing.

number of cases: 80,379 *waves*: A(1984) - BE(2014) *samples*: A, B, C, D, E, F, G, H, I, J,K,L,M

variables:

HHNR	original household identifier
PERSNR	unique individual identifier
BIOYEAR	year of biography / youth interview
AGEFJOB	age at first job
AGEINFO	information source AGEFJOB
NOJOB	never worked before the time of the interview
STILLFJ	still employed in first job

OCCFJOB	occupational position first job
FULLTIME	first job was a full-time or part-time job
FJBLUE	first job blue collar worker
FJSELFE	first job self-employed
FJSEFSIZ	number of employees FJSELFE
FJWHITE	first job white collar worker
FJCIVS	first job civil servant
ISCO88	International Standard Classification of Occupation 1988, first job
STBA	classification of career according to the Federal Statistical
	Office, Germany, (Statistisches Bundesamt), version 1992, first job
EGP	Erikson and Goldthorpe's Class Category (EGP), first job
ISEI	International Socio-Economic Index of Occupational Status after
	Ganzeboom (ISEI), first job
MPS	Magnitude Prestige Scale after Wegener, first job
SIOPS	Treiman Standard Int. Occ. Prestige Scale, first job
REQEDUC	required education for first job
CIVILSFJ	first job was in civil service
NACEFJ	NACE branch code first job
OCCMOVE	number of occupational changes
AGEATMV	age at most recent occupational change
INTEDUC1	
to	
INTEDUC4	intended educational degree
CURREMPL	employed at time of biography interview
YEARLAST	year of last employment
SCOPELJ	last job was a full-time or part-time job
CIVILSLJ	last job was in civil service
NACELJ	NACE branch code last job
OCCLJOB	occupational position last job
LJBLUE	last job blue collar worker
LJSELFE	last job self-employed
LJSEFSIZ	number of employees LJSELFE
LJWHITE	last job white collar worker
LJCIVS	last job civil servant

If data are missing, we use the SOEP missing value definition:

- -1 no answer / don't know: item nonresponse
- -2 does not apply
- -3 after intensive checks a given value was found to be implausible and was fnally deleted (to be interpreted like -1)

Description of variables

AGEFJOB/AGEINFO

The variable AGEFJOB provides the age at entry into the working force. AGEINFO is a pointer variable indicating the source of the age information.

In the Biography Questionnaire people either have to give information on their age at entry into the working force or have to state that they have never worked before the time of the interview. The latter information is used in the variable NOJOB.

In the Youth Questionnaire people have to answer whether they are currently working in a regular occupation. They are not asked about the age at their first occupation, but since people answering the Youth Questionnaire are normally at the age of 16 or 17, in most cases we can assume that a full-time job at this age is their first regular employment.

Information on the coding procedure of AGEFJOB is provided in the following subsections where (a) to (i) refer to LELA respondents, (j) to (p) to youth respondents respectively.

LELA-respondents

- a) For people who are or have ever been employed at the time of answering the biographical questions their age at the time of entry into the working force is taken from the LELA-files.
- b) When we observe, that the person has not been in the working force at the time of responding, but starts to work later on, data of the PBIOSPE-file is used. Using the spell information in PBIOSPE, we are able to collect the age at the first job.
- c) A replacement of the LELA-data takes place, when respondents state that they have worked before the age of fifteen, but have a spell entry later than the age of fifteen. This rule is not applied when the spell starts at the age of fifteen, since this is the minimum value for spell data in the questionnaires.
- d) The same procedure is applied, when people answer, that they have never worked at the time of the interview, but have a spell which starts before the first interview.

- e) In some cases the AGEFJOB value is higher than the start of the corresponding working spell in PBIOSPE. In general, the AGEFJOB value is maintained. Only when the value is greater than 27, is it replaced by the PBIOSPE data. (95% of these cases have an AGEFJOB below 27.)
- f) If we observe item non response concerning AGEFJOB and NOJOB, but spell information is available, the missing value is replaced by the corresponding PBIOSPE spell data.
- g) If even the 'What did you do since you were 15' question had not been answered, there still was a chance to extract similar information out of the PBIOSPE-file by considering the question 'What did you do every month last year'.
- h) If we still had no valid information, the value of AGEFJOB was left out of the dataset.
- *i)* Due to the fact that PBIOSPE information are collected only until the end of the year preceding the actual wave, for respondents without first job information from both the biography questionnaire and PBIOSPE we further look for a first job using information from the current wave individual questionnaire.

YOUTH-respondents

- j) For respondents who are regularly employed, information is taken from the Youth Questionnaire; AGEFJOB is coded as year of questioning minus year of birth minus one (only if the respondent does not state that he/she is still in school, etc.).
- k) If we additionally observe a spell starting before the respondent answers the Youth Questionnaire, information from PBIOSPE is used if the respondent does not state in the current questionnaire that he/she is still in school, etc.
- If respondents answer that they have no regular employment but provide an employment spell starting after the time of the first interview, information from \$P (for details see m) is taken if available (only if the respondent does not state that he/she is still in school, etc.).
- m) For respondents with inconsistent first job information (simultaneous employment and school attendance/apprenticeship, differing job info in Youth Questionnaire and PBIOSPE) the question 'Are you currently engaged in paid employment?' asked in the Individual Questionnaire turned out to be the most reliable source of information. If a respondent states to be full- or part-time employed in a wave subsequent to the youth interview, AGEFJOB info is derived from the latest information of that kind.
- n) If people do not answer at least one of the questions 'Do you currently earn money?" and 'Do you earn money as an apprentice, full-time worker or part-time-worker?" but have an

employment spell, like in m) the earliest \$P information is taken if available (only if the respondent does not state that he/she is still in school, etc.).

- o) If information from the Youth and the Individual Questionnaire (including PBIOSPE) are inconsistent concerning AGEFJOB, then the variable is set to missing.
- p) Due to the fact that PBIOSPE information are collected only until the end of the year preceding the actual wave, for respondents without first job information from both the Youth Questionnaire and PBIOSPE we further look for a first job using information from the current Individual Questionnaire.

The pointer variable AGEINFO provides the coding information described above. Value labels of AGEINFO indicating the source of information are:

- (1) LELA-files (case (a) above)
- (2) PBIOSPE if AGEFJOB<15, but spell begin > 15 (c)
- (3) PBIOSPE if 'not worked' at interview but later spell begin (b)
- (4) PBIOSPE if 'not worked' at interview but earlier spell begin (d)
- (5) PBIOSPE if AGEFJOB>27 and earlier spell begin (e)
- (6) implausible information therefore set missing (h)
- (7) PBIOSPE if 'not worked'-question and AGEFJOB not answered, but 'what done at 15'-question answered (f)
- (8) PBIOSPE if 'not worked'-question, AGEFJOB and 'what done at 15'-question not answered, but 'what done last year'-question answered (g)
- (9) completely missing
- (10) SP if no info from bio interview and PBIOSPE but employment in current Individual Questionnaire (i)
- (11) info drawn from Youth Questionnaire(j)
- (12) info drawn from PBIOSPE for persons who state in the Youth Questionnaire to be regularly employed and additionally have an employment spell starting earlier (k)
- (13) info drawn from \$P for persons who state in the Youth Questionnaire not to earn money relating to an employment/job or to earn money but relating to a part-time job or a practical training, and have a subsequent employment spell (l)
- (14) info drawn from \$P for persons with inconsistent first job information from the Youth Questionnaire or PBIOSPE, but valid employment information from an Individual Questionnaire subsequent to the biography interview (m)

- (15) info drawn from \$P for persons with item non response in one of the questions 'Do you already earn money from jobs?' or 'Do you earn that money as a trainee, full-time or part-time employee?' and with info in PBIOSPE (n)
- (16) completely missing
- (17) set to missing because of inconsistent information (o)
- (18) info drawn out of UP, the last wave of the SOEP (p)

For more than 50% of the cases with AGEINFO = 3, 7, or 8 (AGEINFO=7 or 8 only if information collected after biography interview) it is possible to extract information from the regular questionnaires.

For respondents with AGEINFO=10 or 11, information referring to the variables OCCFJOB, FJBLUE, FJWHITE, FJSELFE, FJSEFSIZ, FJCIVS, REQEDUC and CIVILSFJ are taken from the Individual Questionnaire (same year as of youth interview). While for respondents having AGEINFO=10 this approach is intuitive, for the persons having AGEINFO=11 we act on the assumption that the job declared in the respective Individual Questionnaire is still the first job of that person. This assumption seems plausible due to the low age of all persons responding to the YOUTH Questionnaire.

In the YOUTH Questionnaire there is no question on the first job. But we can follow up their professional career by the statements given in the activity calendar in the subsequent waves. This can lead to problems if these youths report student jobs. For that reason we decided to take information from the question "Are you currently engaged in paid employment?" asked in the Individual Questionnaires of subsequent waves as the relevant source of information for this group of respondents. The earliest information of that kind determines the variable AGEFJOB.

Some respondents have very low values with respect to AGEFJOB. Most of these jobs turn out to be low-skilled and starting before 1970. The respective persons are either blue collar workers (mostly unskilled) or self-employed (mostly helping in family business). We think these characteristics suggest that these specifications are valid.

NOJOB

The underlying question for the variable NOJOB is 'I have never been employed up to this date'. This variable has the label 'never been employed until the date of the interview" (1).

If NOJOB has a missing value, in general there should exist AGEFJOB information, for special cases, see above. Due to the lack of a comparable question in the Youth

Questionnaire, respondents of this questionnaire are given the value (1) as long as no consistent AGEFJOB information is available.

STILLFJ

This variable is based on the question 'Are you still employed in the same job and at the same place?'. It applies only to LELA respondents who do not state 'I have never been gainfully employed' and whose biography interview was after 2000.

Value labels:

- (1) Yes
- (2) No

FULLTIME

The FULLTIME-variable is used to indicate, whether the first job of a person was a full-time or a part-time job. The value labels are

- (0) part-time job or marginal employment
- (1) full-time job.

This variable is generated out of the file PBIOSPE for all respondents. For persons with first job information stemming from the Biography Questionnaires, FULLTIME possibly does not refer to the declared first job if PBIOSPE does not contain the respective job spell (i.e. due to item non response or incomplete answering of the activity biography within the Biography Questionnaire).

OCCFJOB

The variable OCCFJOB provides information on the occupational position at the first job. Due to different versions of the questionnaires in the GSOEP's different samples we face some difficulties. Table 1 gives an overview.

	Farmers (not self- employed)	Blue Collar Workers	Self-employed	White Collar Workers	Civil Servants
Sample A, B (84-95)	-	5	5	5	4
Sample C (90-95)	4	5	5	4	4
Sample D (94/95)	4	5	5	4	4
Sample A,B,C,D (96)	-	3	4	3	4
Sample A,B,C,D (97-99), E (99)	-	3	4	4	4
Sample A,B,C,D,E (00)	-	3	6	4	4
Sample A,B,C,D,E,F (01)	-	3	10	4	4
Sample A,B,C,D, E,F (02)	-	5	10	6	4
Sample A,B,C,D, E,F,G(06),H(06), I(10),J(11),K(12)	-	5	10	6	4

Table 1: Number of Possible Values for Occupational Classifications in the First Job

Facing these differences we decided to standardise the occupational classification. Only four types of occupational status were taken into account: blue collar workers, white collar workers, civil servants, and self-employed. The group 'Farmers' is included in the blue collar worker group.

The potential value labels for OCCFJOB are:

- (1) blue collar worker
- (2) self-employed
- (3) white collar worker
- (4) civil servant

Further details are provided by the variables FJBLUE (for blue collar workers), FJSELFE (self-employed), FJWHITE (white collar workers), and FJCIVS (civil servants). Table 2 shows the number of possible values.

Table 2:	Number of Possible Values for the subcategories of the variable OCCFJOB
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	FJBLUE	FJSELFE	FJWHITE	FJCIVS
Sample A,B,C,D, E,F,G,H,I,J,K(12)	9	4	7	4

Due to the fact that the PBIOSPE-file is used for the coding of AGEFJOB in certain cases (see above) there is less information on OCCFJOB than on AGEFJOB.

FJBLUE

The FJBLUE variable provides detailed information on the first occupational status if the person was a blue collar worker. Certain value labels are only given for certain samples, because of the already mentioned differences in the questionnaires.

The following value labels are assigned:

- (10) un- and semiskilled farmers (sample C/D)
- (11) unskilled worker
- (12) semiskilled worker
- (20) skilled worker
- (30) farmers (sample C/D) being foreman or master craftsman
- (31) foreman (sample A/B)
- (32) foreman (sample C/D)
- (40) master craftsman
- (41) farmers (sample C/D) in middle and higher management

FJSELFE/FJSEFSIZ

The FJSELFE variable provides detailed information on the first occupational status if the person was self-employed. FJSEFSIZ gives the number of employees in the respondent's firm. Again there are differences due to the different versions of questionnaires.

The following value labels are assigned:

- (10) independent farmer
- (20) free lances, self employed academics
- (30) other self employed workers
- (40) helping within family business

FJSEFSIZ has the following value labels:

- (10) number of employees ≤ 9 (all subsamples (see exceptions for samples C/D), up until wave M)
- (11) no co-workers (all subsamples, from wave R on)

- (12) number of co-workers 1-9 (all subsamples, from wave N on)
- (20) number of employees > 9 (all subsamples (see exceptions for samples C/D))
- (30) number of employees ≤ 10 (sample C (waves I to L) / D (waves K to L), only if info drawn from biography questionnaire)
- (40) number of employees > 10 (sample C (waves I to L) / D (waves K to L), only if info drawn from biography questionnaire)

FJWHITE

FJWHITE gives detailed information on persons, who were first employed as white collar workers. The subvalues of unskilled labour without degree (21), or with degree (22) are, due to uncomparable values in the LELA-files, only drawn from the \$P-Files. (Beginning with BIOJOB 2004).

Potential value labels:

- (10) industrial foreman
- (20) employee / unskilled labour
- (21) same as (20), but without degree
- (22) same as (20), but with degree
- (30) employee / skilled labour
- (40) employee / professional labour
- (50) employee / managerial labour

FJCIVS

FJCIVS provides detailed information on first employment as a public servant.

The following value labels occur:

- (10) low level civil servant
- (20) middle level civil servant
- (30) high level civil servant
- (40) executive civil servant

ISCO88, STBA EGP, ISEI, MPS, SIOPS

These variables – job classifications and different prestige scores – concerning in each case the first job but are not generated within this file and therefore they are not described within this documentation.

REQEDUC

REQEDUC provides information about the required education for the first job. This information has been asked in the Biography Questionnaire for the first time in the year 2001, but comparable information are gathered by the Individual Questionnaire in all waves.

For all respondents having their first job subsequent to their biography interview, information is drawn out of the generated file \$PGEN. Neither respective variables in \$P nor those in \$PGEN provide full information for all waves. In both data sources no differentiation is made between vocational college degree and university degree. As \$PGEN info is equally coded in all waves, it is preferred to \$P info.

Potential value labels:

- (10) no training
- (20) completed vocational training
- (30) vocational college or university degree
- (31) vocational college degree
- (32) university degree

CIVILSFJ

CIVILSFJ indicates if the first job was assigned to the civil service or not. This information has been asked in the 2001 Biography Questionnaire for the first time

For respondents having their first job subsequent to their biography interview, information is drawn out of the generated file \$PGEN where this information is provided since the first wave in 1984.

The following value labels occur:

- (1) Yes
- (2) No

NACEFJ

NACEFJ provides information about the industrial sector of the first job according to the branch classification NACE. This variable is not generated within this file. The description of its value labels is therefore not part of this documentation.

OCCMOVE

The variable OCCMOVE is based on the question 'Did you change your occupation and if you did, more than once?'. Information stems from the year of the biography interview. For respondents of the Youth Questionnaire as well as persons having their first job after the biography interview no information is available.

Labels of **OCCMOVE**:

- (1) never changed occupation
- (2) changed once
- (3) changed more than once

AGEATMV

This variable is based on the question 'If you changed your occupation, how old were you at the most recent change?'. Information stems from the year of the biography interview. For respondents of the Youth Questionnaire as well as persons having their first job after the biography interview no information is available.

CURREMPL

This variable is based on the question 'Are you gainfully employed at the current time?'. The question applies only to LELA respondents who do not state 'I have never been gainfully employed' or 'Still employed in the first job'. This question has been asked in 1994 for the first time.

Value labels:

- (1) Yes
- (2) No

YEARLAST

This variable is based on the question 'When was the last time you were gainfully employed?'. The question applies only to LELA respondents who do not make at least one of the following statements in their biography interview:

'I have never been gainfully employed.'

'Still employed in the first job'

'Gainfully employed at the current time'.

This question has been asked in 1994 for the first time.

SCOPELJ

SCOPELJ indicates if the last job was a full time or part time job.

Information is only provided for respondents who answer the respective question within the Biography Questionnaires. The respective question applies only to respondents who do not make at least one of the following statements:

'I have never been gainfully employed.'

'Still employed in the first job'

'Gainfully employed at the current time'.

This question has been asked in 1994 for the first time. For youth respondents no information is available.

Value labels:

- (1) full-time employed
- (2) part-time employment
- (3) marginal / irregular employment

CIVILSLJ

CIVILSLJ indicates if the last job was assigned to the civil service or not.

Information is only provided for respondents who answer the respective question within the Biography Questionnaires. The respective question applies only to respondents who do not make at least one of the following statements:

'I have never been gainfully employed.'

'Still employed in the first job'

'Gainfully employed at the current time'.

This question has been asked in 1994 for the first time. For youth respondents no information is available.

The following value labels occur:

- (1) Yes
- (2) No

NACELJ

NACELJ provides information about the industrial sector of the last job according to the branch classification NACE. The respective question applies only to respondents who do not make at least one of the following statements in their biography interview:

'I have never been gainfully employed.'

'Still employed in the first job'

'Gainfully employed at the current time'.

This question has been asked in 1994 for the first time.

This variable is not generated within this file. The description of its value labels is therefore not part of this documentation.

OCCLJOB

The variable OCCLJOB provides information on the occupational position at the last job. The respective question applies only to respondents who do not make at least one of the following statements in their biography interview:

'I have never been gainfully employed.'

'Still employed in the first job'

'Gainfully employed at the current time'.

This question has been asked in 1994 for the first time.

Due to different versions of the questionnaires in the GSOEP's different samples we face some difficulties. Table 3 gives an overview:

Table 3: Number of Possible Values for Occupational Classifications in the Last Job

	Farmers (not self- employed)	Blue Collar Workers	Self-employed	White Collar Workers	Civil Servants
Sample A,B (94/95)	-	5	5	5	4
Sample C,D (94/95)	4	5	5	4	4
Sample A,B,C,D (96-99), E (99)	-	5	5	6	4
Sample A,B,C,D,E (00)	-	5	6	6	4
Sample A,B,C,D, E,F (01/02)	-	5	10	6	4
Sample A,B,C,D, E,F,G(06),H(06),I(10), J(11)	-	5	10	6	4

Facing these differences we decided to standardise the occupational classification. Only four types of occupational status were taken into account: blue collar workers, white collar workers, civil servants, and self-employed. The group 'Farmers' is included in the blue collar worker group.

The potential value labels for OCCLJOB are:

- (1) blue collar worker
- (2) self-employed
- (3) white collar worker
- (4) civil servant

Further details are provided by the variables LJBLUE (for blue collar workers), LJSELFE (self-employed), LJWHITE (white collar workers), and LJCIVS (civil servants). Table 4 shows the number of possible values.

	LJBLUE	LJSELFE	LJWHITE	LJCIVS
Sample A,B,C,D, E,F,G,H,I,J(84-11),K(12)	9	4	7	4

Table 4: Number of possible values for the subcategories of the variable OCCLJOB

LJBLUE

The LJBLUE variable provides detailed information on the last occupational status if the person was a blue collar worker. Certain value labels are only given for certain samples, because of already mentioned differences in the questionnaires.

The following value labels are assigned:

- (10) un- and semiskilled farmers (sample C/D)
- (11) unskilled worker
- (12) semiskilled worker
- (20) skilled worker
- (30) farmers (sample C/D) being foreman or master craftsman
- (31) foreman (sample A/B)
- (32) foreman (sample C/D)
- (40) master craftsman
- (41) farmers (sample C/D) in middle and higher management

LJSELFE/LJSEFSIZ

The LJSELFE variable provides detailed information on the last occupational status if the person was self-employed. LJSEFSIZ gives the number of employees in the respondent's firm. Again there are differences due to different versions of questionnaires.

The following value labels are assigned:

- (10) independent farmer
- (20) free lances, self employed academics
- (30) other self employed workers
- (40) helping within family business

LJSEFSIZ has the following value labels:

- (10) number of employees ≤ 9 (all subsamples (see exceptions for samples C/D), until wave M)
- (11) number of co-workers = 0 (all subsamples, from wave N on)
- (12) number of co-workers 1-9 (all subsamples, from wave N on)
- (20) number of employees > 9 (all subsamples (see exceptions for samples C/D))
- (30) number of employees ≤ 10 (sample C (waves I to L) / D (waves K to L), only if info drawn from biography questionnaire)

(40) number of employees > 10 (sample C (waves I to L) / D (waves K to L), only if info drawn from biography questionnaire)

LJWHITE

LJWHITE gives detailed information on persons, who were last employed as white collar workers. The values (21) and (22) are drawn from the BIOLELA-File and from the \$P-files.

Potential value labels:

- (10) industrial foreman
- (20) employee / unskilled labour
- (21) same as (20), but without degree
- (22) same as (20), but with degree
- (30) employee / skilled labour
- (40) employee / professional labour
- (50) employee / managerial labour

LJCIVS

LJCIVS provides detailed information on last employment as a public servant.

The following value labels occur:

- (10) low level civil servant
- (20) middle level civil servant
- (30) high level civil servant
- (40) executive civil servant

INTEDUC1 to INTEDUC4

The variables INTEDUC1, INTEDUC2, INTEDUC3, and INTEDUC4 provide information on the educational degree or the vocational/professional training a respondent intends to complete in the future, asked at the time of the biography interview. We create these four variables since multiple answers are explicitly allowed in the questionnaire. The intended education is stored with respect to the hierarchy given by the questionnaire, i.e., the highest degree is placed in INTEDUC1. For example, a person intending to finish an apprenticeship (1) and university (7) would have INTEDUC1 = 7 and INTEDUC2 = 1. Since this question has been asked for the first time in 1996, we do observe a large number of missing values for INTEDUC1 to INTEDUC4.

- (1) apprenticeship
- (2) full-time vocational school
- (3) technical school
- (4) education as a civil servant
- (5) accredited professional school
- (6) technical or professional college
- (7) university

General remark:

Some persons answered more than once the Biography Questionnaire (but this occurs very rarely). The data-set BIOJOB contains only information from one Biography Questionnaire, in most cases the earlier one.

5.3 Steps of Coding

- Creating a dataset using the data concerning all aspects of the job biography (working force entry, position, etc.) drawn from BIOLELA, MLELA, NLELA, OLELA, PLELA, QLELA, RLELA, SLELA, TLELA, ULELA, VLELA, WLELA, XLELA, YLELA, ZLELA, BALELA, BBLELA, BCLELA (internal DIW files with biographical information up to wave BB), QJUGEND, RJUGEND, SJUGEND, TJUGEND, UJUGEND, VJUGEND, WJUGEND, XJUGEND, YJUGEND, ZJUGEND, BAJUGEND, BBJUGEND, BCJUGEND (internal DIW youth biography files), QP, RP, SP, TP, UP, VP, WP, XP, YP, ZP, BAP, BBP, BCP (needed for consistency checks with respect to the youth biography files).
- 2. Using the PBIOSPE-data to retrieve spell information during the first occupation.
- 3. Using PPFAD for personal data (year of birth, sex, sample).
- 4. Using several files containing generated information about job classification (ISCO), prestige scores and industry sector classification (NACE) concerning the first job.
- 5. Combining all data concerning the employment biography into a new data file BIOJOB, where priority is set as mentioned above.
- 6. Coding of AGEFJOB. (for details, see above)

- 7. Setting the pointer variable AGEINFO indicating the source of the information of AGEFJOB. (for details, see above)
- 8. Excluding one value for respondents, who stated to have two occupational positions in their first job. Exclusion based on consistency checks.
- 9. Assignment of the variable OCCFJOB, with respect to the different versions of the questionnaire. Possible value labels: FJBLUE, FJSELFE, FJWHITE, FJCIVS.
- 10. Definition and assignment of new value-labels for the sub-category FJBLUE, nine labels possible, for details see above.
- 11. Definition and assignment of new value-labels for the sub-category FJSELFE, four labels possible, for details see above.
- 12. Definition of the variable FJSEFSIZ, indicating the numbers of employees.
- 13. Definition and assignment of new value-labels for the sub-category FWHITE, seven labels possible, for details see above.
- 14. Definition and assignment of new value-labels for the sub-category FJCIVS, four labels possible, for details see above.
- 15. Coding of the variables REQEDUC and CIVILSFJ.
- 16. Coding of the variables INTEDUC1 to INTEDUC4.
- 17. Computing the age at the most recent change of occupation if necessary.
- 18. Check of consistency: Does information about the age at the most recent change of occupation make sense? If inconsistencies appear, the value is set to a missing value.
- 19. Assignment of value labels for the variables specifying the last job:
- 20. Definition and assignment of value labels of the variable CURREMPL indicating if a respondent is gainfully employed at the time of the biography interview.
- 21. Specification of the year of last employment (YEARLAST).
- 22. Coding of the variables SCOPELJ and CIVILSLJ.
- 23. Excluding one value for respondents, who stated to have two occupational positions in their last job. Exclusion based on consistency checks.
- 24. Assignment of the variable OCCLJOB, with respect to the different versions of the questionnaire. Possible value labels: LJBLUE, LJSELFE, LJWHITE, LJCIVS.
- 25. Definition and assignment of new value-labels for the sub-category LJBLUE, nine labels possible, for details see above.

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- 26. Definition and assignment of new value-labels for the sub-category LJSELFE, four labels possible, for details see above.
- 27. Definition of the variable LJSEFSIZ, indicating the numbers of employees.
- 28. Definition and assignment of new value-labels for the sub-category LJWHITE, seven labels possible, for details see above.
- 29. Definition and assignment of new value-labels for the sub-category LJCIVS, four labels possible, for details see above.
- 30. Collecting of job information for people with AGEINFO = 3, 7 or 8, if possible.
- 31. Collecting of job information for people with AGEINFO = 12, 14 or 16, if possible.
- 32. Coding of the variable FULLTIME.
- 33. Definition of missing values for all variables.
- 34. Hand-editing of inconsistencies between different variables.
- 35. Final listing
- 36. Definition and assignment of new value-labels for the sub-category LJCIVS, four labels possible, for details see above.
- 37. Collecting of job information for people with AGEINFO = 3, 7 or 8, if possible.
- 38. Collecting of job information for people with AGEINFO = 12, 14 or 16, if possible.
- 39. Coding of the variable FULLTIME.
- 40. Definition of missing values for all variables.
- 41. Hand-editing of inconsistencies between different variables.
- 42. Final listing

6 The couple history files BIOCOUPLM and BIOCOUPLY, and marital history files BIOMARSM and BIOMARSY

by Maik Hamjediers and Paul Schmelzer¹

With the BIOMARSM/Y and BIOCOUPLM/Y the SOEP provides consistent and continuous marital and partnership histories for nearly all adult respondents. Whereas BIOMARSM and BIOCOUPLM just build on the prospective information at the time of each interview, BIOMARSY and BIOCOUPLY – containing also retrospective data – provide complete marital histories of respondents, starting at the year of their birth. But since untill wave 27 no questions on a respondents' couple history were asked, BIOCOUPLY includes only those respondents who have answered the biography questionnaire in wave 28 or later (and those who have been observed since the age of 17). Thus, all four datasets contain different information and therefore Table 1 gives an overview on the most important differences.

Table 1: Ov	Table 1:Overview of the datasets									
	Provided type of history	Time unit	Starting time	Sample						
BIOMARSM	Marital Histories	Month	Entry into SOEP	All adult SOEP-participants						
BIOMARSY	Marital Histories	Annual	Year of birth	All adult SOEP-participants						
BIOCOUPLM	Relationship Histories	Month	Entry into SOEP	All adult SOEP-participants						
BIOCOUPLY	Relationship Histories	Annual	Year of birth	Adult respondents answered the biography questionnaire after wave 27 or which were observed since the age of 17						

Note that the marital status in the \$PGEN data files, stored as \$FAMSTD, is derived from BIOCOUPLM and BIOMARSM at the time of the interview. Although the partner indicator PARTZ\$ supplied in the \$PGEN data files is considered in the generating process of BIOCOUPLM and BIOMARSM, due to different generating processes, it might not entirely

¹ This documentation is a new version of previous SOEP documentations for the same files and has benefited from the work made by previous generators. For readability reasons, we do not specifically cite and specify text that has been used directly from the older SOEP documents.

match with \$FAMSTD. Furthermore consistency checks between waves were done as well. That way, changes between data distributions in \$FAMSTD but also in the couple and marital history datasets are possible for former waves.

This documentation proceeds with a short description of the sources for the generating process and of the editing process of constructing logical and consistent marital and couple histories. These steps are important to understand the description of the four data files following in the next parts.

6.1 Sources of the couple and marital history

For the construction of individual marital and relationship histories we gathered information

- on current marital and couple status conducted in the personal questionnaire \$P (and \$PAUSL and \$PLUECKE);
- 2. on monthly information on events, that may have occurred since the last personal interview, which are also stored in \$P (and \$PLUECKE);
- 3. on the generated partner pointer PARTZ\$\$ of the generated dataset \$PGEN, which links current partners living in the same household;
- 4. on the *marital and relationship biography* from the biographical questionnaire \$LELA (and BIOLELA and BIOIMMIG).

The personal questionnaire comprises a question on the marital status at the month of interview (Question 127 in 2014), whereby information on registered partnerships is included only since 2011. Furthermore it is asked for the current couple status, which entails whether someone has a partner and if so whether they are living together (Question 128 in 2014). For immigrants we also used information on the marital status derived from the foreigner questionnaire stored until 1995 in \$PAUSL and for temporary drop outs we replaced missing information with data from a short version of the personal questionnaire, which information is stored in \$PLUECKE. Moreover at least once the majority of SOEP participants answers the biography instead of the personal questionnaire, and for those waves the current marital and couple status is stored in \$LELA. This hereby out of the four sources gathered information on the current marital couple status is used to generate spells, beginning at the time of the interview and reaching to the next interview in which a change in the status is reported.

For those interviewed again it is also asked for any changes that occurred during the last year (Question 150 in 2014).² This monthly information on the events 'moved in together', 'marriage', 'divorce', 'separation', 'death of partner' and since 2011 'starting a new relationship' that may have occurred since the last personal interview supplements the

² Due to the fact that events were collected retrospectively from first of January of the last calendar year until the month of interview, events in the beginning of a year could have been reported twice in two consecutive waves. Taking variations up to twelve months for the same event into account, the timing of the events were corrected.

previous generated marital and couple status spells In addition, we added the generated partner pointer, which was just used as another source of. These three kind of information – events, the current status and the partner indicator – were used to generate the monthly datasets BIOMARSM and BIOCOUPLM.

For the annual files, we additionally resorted on the retrospective information of the biographical questionnaire, which nearly all respondents just answer one time while participating in the SOEP. Since until 2010 it was just asked for the last three marriages (Question 72 in 2010), for all respondents having used the old version it was only possible to generate marital and no couple biographies from their year of birth on. In 2011, design of the retrospective questionnaire collecting information on couples changed notably. It now contains information on up to three previous marriages, registered same-sex partnerships or long-term relationships, defined as lasting for at least six months (Question 81 in 2014). Hence, up to four relationships, are possible to mention.³ Therefore for all respondents who have used the biography questionnaire after 2010 we generated the annual data BIOCOUPLY, whereas all responses to any biographical questionnaire were used to generate BIOMARSY. Naturally, the information drawn from the biographical questionnaires are proceeded by the responses to the personal questionnaire for the following waves. This is done by extending the monthly spelldata from BIOCOUPLM and BIOMARSY to an annual format; thus for this time, also shorter relationships were possible to mention, for example via the monthly information on the events mentioned above.

6.2 Construction of marital histories

Information on marital history mainly stems from respondents' retrospective reports on their own history. Thus, no other benchmark on the substance of these reports exists. This led to inconsistencies – for example, overlapping of reported marriages or impossible changes between legal states. In contrary to the relationship histories, where odd patterns of the reported histories occurred but were also possible for the most part, rules for logical histories of the legal marital status had to be laid down in the generation process:

- 1. Every individual marital history has to start with the state 'unmarried'. We did not allow a person to be married before age 16.
- 2. From 'unmarried', one can only change to 'married' or into 'living in a registered same-sex partnership'.

³ Please note, that also between 2011 and 2014 the questions of the biography questionnaire were changed. From 2011 to 2013 it was also possible to mention a fourth previous relationship, thus the questions for that relationship was limited compared to the question about the other relationships. Furthermore, the biography questionnaire of the National Survey of Families (FiD-Sample) left out the option of reg. same-sex partnerships.

- 3. There is no possible return to 'unmarried' once a person was ever 'married'.⁴ The only possible change from 'married' is to 'divorced', 'widowed' or 'divorced or widowed'.
- 4. The only possible change from 'divorced' or 'widowed' is to 'married'.
- 5. Reported separations of married spouses are taken into account as well. This led to the new category 'married, separated' which is coherent with the BIOCOUPL datasets and contains the time from a separation until a divorce or death of the respondent's spouse. Thus, this rule was not applied for move-outs and later returns into the household of the same partner. If another marriage with a new partner is reported without a divorce or a death of the previous partner, after the 'married, separated'-spell an episode of the category 'divorced or widowed' is also added and the beginning and end of those spells were adjusted (Figure 1).

Figure 1: Example for treatment of separated marriages in BIOMARSM/Y

Respondents information

Added spells

persnr	spellnr	spelltyp	begin	end	divorce		persnr	spellnr	spelltyp	begin	end	divorce
1	1	married	10	50	0		1	1	married	10	50	0
1	1	married	10	50 0	0 0	/	1	2	married, separated	50	-1	-1
1	2	married	100	150	0	<	1	3	divorced or widowed	-1	100	0
1	2	married	100	150	5		1	4	married	100	150	0

Algorithms rearrange and correct original data to produce logically consistent marital histories following these five rules. Thus, we inserted an obligatory first 'unmarried' spell starting with birth and ending with the first marriage. Possible contradictions in the data were checked and edited as well, i.e.: a) contradictions between responses given in the same year in the different, previously described sources; b) illogical sequences between years.

While most of the original data was used, we edited some spells, e.g. because of the notion of "romantic wedding". This idea assumes that respondents often define their marital status in subjective or even affective terms rather than referring to the legal marital status. For instance, we frequently observe unmarried couples both reporting to be married for one year, and then returning to define themselves as singles (this phenomenon we call "romantic marriage"). Another rather emotional defined marital status are changes between the reported state of being divorced and being married, but not living together. This might stand for an insecure

 $^{^4}$ Except for the annulations of a marriage. However, given that this event is extremely rare – in particular compared to the many returns to 'unmarried' that we find in the data – we did not consider the possibility of annulations.

period after a break-up of a marriage and the changes between the states are corrected until any clear indication for an actual divorce is reported. A third frequent pattern refers to divorced respondents who report to be unmarried after they started a new relationship, since they may want to avoid the new partner to come to know about the former marriage. Since this kind of change of the legal marital status is impossible, the status of being divorced is assigned till the next reported marriage.

If responses on marital status alternate between 'divorced' and 'widowed' without reporting another marriage in between, the information reported most often was used to correct these contradictions. Sequences alternating short-termed between 'divorced' / 'unmarried' and 'married' are replaced by 'married', as long as a new partner, a longer consistent sequence or the report of an event does not confirm this possibly new marriage. If the very end of a reported sequence indicates an 'unmarried' spell after being married and without further information, the marital history ends with a 'divorced or widowed', indicating that the reason for the end of a marriage is not known. Likewise, reported weddings during still existing marriages are ignored mostly.

In cases where information of both partners on their joint marriage is available, contradictions in dates were not dissolved and the original information is not replaced. You can identify these spells by sorting the couples in the BIOCOUPLM dataset using the variable COUPID and decide which information you find more reliable.

Completeness is a further criterion for construction of marital histories in the sense that the spell system is a closed system of spells starting from birth or the entrance into the SOEP going to the last year of sample membership. Due to item as well as partial unit non-response (i.e., a person of a SOEP households refuses to give a personal interview) and due to inconsistent information, 'gap' spells are introduced as another category of SPELLTYP on its own. Gap spells can occur at any place in the spell system, i.e., there are no restriction rules like the ones above. If information on marital status is missing for more than two years we inserted gap spells indicating that we have no knowledge of what happened during these periods. Likewise, missing retrospective biography information is indicated by an inserted gap spell. Also, if three finished marriages were reported in the biography questionnaire and a fourth current marriage via the next marital status, another gap is inserted. Missing information due to item non-response in the life course questionnaire may also affect the dates of the beginning or end of a spell.

6.3 Construction of couple histories

As stated above, most of reported odd patterns in the couple histories may be possible and hence, no verified decision between measurement error and uncommon reality can be made.

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For that reason, whenever possible, couple histories are left as they were stated. Only in rare cases, restrictions, corrections on orderings of events or changes of declared years are conducted (read the following paragraphs for details). Further corrections to smooth out irregularities are thus left to the user.

Firstly, the following default rules were obeyed to obtain logical and consistent histories if no other information forced to do otherwise:

- 1. Every individual couple history starts at the year of their birth with the state 'single'. Because legal marriages are not possible before the age of 16, we restricted the age of marriage to be at least 16. Thus, we did not restrict age within a relationship, that is, unmarried relationships are allowed to start anytime.
- 2. Every spell set for a certain couple starts with the state 'coupled, partner not in household'. One exception exists: if respondents report a year of moving together that lies before the start of their relationship, this specific couple history starts with 'coupled, partner in household'. Note that in this case the information when this couple moved together is not available in BIOCOUPLM/Y anymore. Analogical the date of moving out is also lost if it was reported to come after the end of a relationship. Both dates you can still look it up in the original source.
- 3. If there is no evidence to the contrary, it is assumed that married couples live together and moved together before marriage. That is: for married couples their specific couple history starts with 'coupled, partner not in household' and is followed by a spell 'coupled, partner in household' before their marriage spell 'married, spouse in household' starts. Thus, if a couple moved together in the same year they married, a spell 'coupled, partner in household' is included anyway. The information whether spells needed to be inserted in order to this rule is stored in the variable REMARK (see Figure 2). Note that dates of becoming a couple and moving together or whether they moved together at all are not known in that case and were set equal to the time of marriage.

Figure 2: Example for additional spells before marriages

Resp	onde	ents information				1	Add	led sp	pells			
persnr	spellnr	spelltyp	begin	end	remark		persnr	spellnr	spelltyp	begin	end	remark
			10	50			1	1	single	10	50	1
1	1 1 single 10	50 1		1	2	coupled, not living together	50	50	2			
1	 2	married, living	50	100	1	<	1	3	coupled, living together	50	50	2
1	1 2 married, itving 5 together 5		30	100	I		1	4	married, living together	50	100	1

- 4. As long as it was possible to mention another relationship in the questionnaire, it is assumed that periods between those relationships mentioned were 'single' states and thus assigned accordingly. Note that this relates to long-term relationships (longer than six months) reported via the biography questionnaire only. In contrast to those, relationships derived from reported changes in the familiar situation in the personal questionnaire may also be shorter than six month.
- 5. Any (formerly) married couple that is not an active relationship anymore, i.e. married couple which is separated but not yet divorced, ends with a spell 'married-separated' (see Figure 3). As long as they are not divorced (or the partner hasn't died) yet, the end date of those separated spells is the same as their last interview year. Contrary to this, the separation spell is not added if marriage clearly ended with a divorce or the death of the respondent's partner and no previous break-up was reported. Be aware, that because the question for a separation does not differentiate between a move-out and a clear ending of a relationship, there is some uncertainty whether a marriage is still active, but not in a joint household or the relationship ended and the spouses are not divorced yet. By using the information of following interviews we identified the spelltyp as clear as possible. Note that 'separated' is a redundant spell in terms of couple history: It always and fully overlaps with other spells that contain the actual couple status(es) over the entire separation episode.

Added spells

Respondents	information
Respondents	mormation

Ittes	spondents information					
persnr	spellnr	spelltyp	begin	end	divorce	
1	1	married, living together	10	50	0	
1	2	coupled, not living together	100	150	0	<

persnr	spellnr	spelltyp	begin	end	divorce
1	1	married, living together	10	50	0
1	2	married, separated	50	150	-1
1	3	single	50	100	0
1	4	coupled, not living together	100	150	0

- 6. Because BIOCOUPLM/Y documents couple statuses and not marital statuses, it is possible to become single after marriage (in BIOMARSM/Y the only possible change from 'married is to 'divorced' or 'widowed').
- 7. Information on the partner's death or a divorce is stored in the variables PDEATH and DIVORCE. It is always just assigned to the last spell of a relationship; if e.g. a marriage ends in divorce, just the last spell containing also the definite end of the relationship is marked via DIVORCE and all previous spells for the same marriage (e.g. 'married, not living together' before a move-in) are marked as 'spell does not end with a divorce' (see also Figure 3). If not applicable, that is if a person is currently single, PDEATH and DIVORCE are set to '(-2) does not apply'. If a respective couple is not married, DIVORCE is set to '(-2), does not apply', as well. (Be careful to change missings into system missing values if you plan to sum up these indicators column-wise.)

Checks were applied for three kind of inconsistencies: a) information from the different sources (e.g. biography and personal questionnaire) for the same years may conflict, b) dates within a personal couple history might appear plausible or not and c) contradictions between information given by a respondent and her relationship to the head of household.⁵ In general it was tried to leave as much of the original information as it is given by the respondent as possible to avoid making assumption which users wouldn't follow and to allow for analyses of uncommon patterns as well.

Concerning the reported status(es) (a) and dates (b), it is possible that a person has multiple, overlapping relationships in a certain period. That is, relationships (in opposition to marriages) do not need to be consecutive. The variable SPELLNR provides the sorting order, whereby the most recent spell comes last, which represents the relationship that started most recently. If no clear dates were available, the sorting in SPELLNR reflects the order of reporting by the respondent. Thus, some overlaps and inconsistencies might still appear in the dataset, which you may want to remove.

Contradictions in both partners' answers (c) are left as they were, even if both were interviewed in the current wave. E.g. information on starting date or the date of marriage of their joint relationship often differs. For very few cases, there were even contradictions about the actual partnership between two individuals in the sample. E.g., if one part of a couple or the position to the head of household suggested a couple in a household, but one or both answered to be single or coupled with someone else (outside the household). Because it may depend on a research question which information is needed, we left irregularities within couples as reported by each spouse; neither date nor the relationship status is edited or

⁵ See \$PSTELL in the dataset \$PBRUTTP. This information was given by the head of household in the Household Questionnaire and processed in partner pointer PARTZ\$\$.

overwritten between both partners of a current couple. To check for contradictions you can link them via couple identifier COUPID or PARTNR\$\$.

Some respondents refused to answer some or all questions in the relationship part. To some extent, missing values and contradiction are similar in the generating sense. Hence, some of the following rules applied to missing values, may seem familiar:

- If a respondent stated to be married or in a relationship, but it is not known whether the couple lived together as well, these relationship spells were set as 'coupled, partner not living in the household' and the respective REMARK was coded as 'edited'.
- 2. Furthermore, if we had clear information about whether a respondent was married or not, but there was contradicting information about whether a respondent was in a relationship or not, we assigned these spells as 'unknown' (98). This applies also to the counterpart, that means the relationship status was definite, but we lacked information whether the couple was married or not.
- 3. In some cases it is possible that a respondent might have had earlier relationships, but they could not be named anymore due to the above mentioned restrictions of the biography questionnaire. Thus, it is not known whether there were other partners before the latest mentioned. In these cases, gaps were introduced, that is a spell 'unit nonresponse' (99) was inserted.
- 4. The relationship history of respondents, who haven't filled out the biography questionnaire, were also supplemented with additional spells: from age 0 they are stated 'single'; between this first single spell until the first mentioned relationship gaps are included as well.
- 5. For many non-interviewed persons' information on the current relationship can be reconstructed, because the respective partner is available from his or her personal interview. Thus, those non-interviewed adults remain in the BIOCOUPLM dataset, even though information is not directly retrieved from them. If information on their current couple status was given by their partner, it is fully copied to these non-respondents as well; the variable REMARK is set as 'added' for these spells.

6.4 BIOCOUPLM: A monthly couple biography

The spell data in the file BIOCOUPLM contains information on marital biographies starting with responses to the first personal interview. The data file comprises fourteen variables: the original household, couple and individual identifiers HHNR, COUPID and PERSNR as well as eleven specific variables. Please note for the couple identifier COUPID that the BEGIN and END the identified partner spells are not necessarily equal: Differences may occur because we give a preference to respondents' own history. To achieve the same dates for BEGIN and END one might give a preference to one of the partners (i.e. by using only the information reported by the women in the relationships).

Variable SPELLNR is a chronological index number for each individual's spells during the observation period. Variables BEGIN and END indicate the month in which a marital spell starts and ends. Monthly histories start with a value of 1 in January 1983 and ranges until the current margin in month 384, i.e., December 2014. In principle, the month in which a spell starts is the very same month the previous spell ends in. Please take into account that the months of BEGIN and END are not imputed when the exact date of the change in the familiar situation is not reported. Instead, the time of the interview is left as the BEGIN or END date when a change is observed in the data. We introduced therefore a variable called EVENTS, containing the information whether the exact month of the BEGIN or END of a spell is reported via the monthly information on events or not.

Variable SPELLTYP documents the partnership status with the possible categories listed below. Note that it is only asked for same-sex partnership since wave 28, thus, this information cannot be reconstructed for previous relationships. The state 'single' is not equal to the legal state 'never married'; it refers only to a person's current state of having a partner or not. 'Married, separated' spells refer only to couples who are still married, i.e. who are separated but not yet divorced. The spell 'Married, separated' always overlaps (in terms of starting and ending time) with other spells that contain the actual couple status(es) over the entire separation episode and is therefore redundant in terms of completeness of couple histories (e.g. spell "Coupled, partner in household" might overlap with spell 'Married, separated'). The additionally assigned codes 'implausible', 'unknown' and 'unit nonresponse' indicate implausible or a lack of information for the respective period.

Variables of **BIOCOUPLM**

HHNR PERSNR COUPID SPELLNR SPELLTYP	Identifier of original sample household Personal identifier Couple identifier Consecutive spell number (chronological order) Partnership status (-3) implausible (1) Married, spouse not in household (2) Married, spouse not in household (3) Coupled, partner in household (4) Coupled, partner not in household (5) Single (6) Married, separated (7) Registered same-sex partnership, partner in household (8) Registered same-sex partnership, partner not in household (98) Unknown
BEGIN END BEGINY ENDY PDEATH DIVORCE CENSOR EVENTS REMARK	 (99) Unit nonresponse Month when spell begins [1=Jan 1983 to 384=Dec 2014] Month when spell ends [1=Jan 1983 to 384=Dec 2014] Year spell begins [1983 to 2014; -3=implausible; -1=missing] Year spell ends [1983 to 2014; -3=implausible; -1=missing] Death indicator: spell ends with death of partner? Divorce indicator: spell ends with divorce? Censoring information [0 to 14] (see explanation below) Month information: exact month of spell begin or end known? Further spell information (1) Original spell (2) Edited spell (3) Added spell (4) Gap Spell (5) First Spell

In addition, the indicator variables PDEATH and DIVORCE are provided. PDEATH indicates whether a respective spells ends with the death of a person's partner. Please note that this is not restricted to married persons, thus does not only refer to widowhood. DIVORCE is similar and indicates whether the marriage spell ends in divorce. Hence if it did not end in divorce, it is coded as missing when a new marriage has been reported or as a still ongoing marriage. In the second case END is updated by the month of the last interview. Both indicator variable PDEATH and DIVORCE are assigned with '(-2) does not apply' for single and '(-1) missing' for gap spells.

It is important to note that a 'first spell' in BIOCOUPLM is not the very first spell of a person, but the first observed partnership status since the person is taking part in the SOEP. Accordingly, the first spell in BIOCOUPLM is almost always left-censored, that means the beginning of the spell is not known. Variable CENSOR informs whether a spell is left- or right-censored (in fact most spells in BIOCOUPLM are censored). Table 2 gives an overview for the coding of the reasons responsible for censoring. With regards to left censoring we

distinguished the reasons 'missing' (which also applies for most of the first spells), 'after gap'; for right censoring the reasons are categorized in 'missing', 'before gap', 'last spell', and 'death of the respondent', whereas 'death' of course is always the 'last spell' and therefore the censor is overwritten with the former category. Certainly spells can also be coded as left- and right-censored combined.

Right: Left:	not censored	censored missing	censored before gap	censored last spell	censored death
not censored	0	3	4	5	6
censored missing	1	7	8	9	10
censored after gap	2	11	12	13	14

Table 2: Coding of the variable CENSOR

Note: '(99) Gap', '(98) unknown' and '(-3) implausible' spells are all uncensored

Variable REMARK provides information on whether we had to edit or supplement original information provided by respondents in order to construct consistent couple biographies. Spells in BIOCOUPLM are marked as 'edited' if the editing process involved substitution of reported information because of inconsistence with responses in previous or following interviews or information reported by a partner. Furthermore we have added spells, e.g. between two marriages because two marriages with separate persons at the same time are not legal (see former section for more details on editing); these spells are marked as 'added spells'. Finally 'first spells' and 'gap spells' are marked separately, whereas also 'added' or 'edited' first spells are marked as 'first spells'.

6.5 **BIOCOUPLY:** An annual couple biography

The spells in the data file BIOCOUPLY contain retrospectively and prospectively collected information on couple history since a respondent's year of birth on an annual basis. Since until wave 27 no questions on a respondent's couple history were asked retrospectively, BIOCOUPLY includes only those respondents who have answered the biography questionnaire in wave 28. So except those, who were observed in the SOEP annually at least since the age of 17, people who answered the biography questionnaire before wave 28 are excluded from BIOCOUPLY. Thus, BIOCOUPLY comprises a much smaller sample than BIOCOUPLM and the BIOMARSM/Y datasets. The newly developed retrospective part of the person questionnaire covers up to four relationships in addition to the current status.

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The data files contain thirteen variables. In contrast to BIOCOUPLM, BIOCOUPLY just contains the original household and individual identifier, due to the fact that no information about the identity of each partner was surveyed in the biography questionnaire and therefore a partner cannot be identified for the relationships before the entrance into the SOEP. The following table provides an overview of the variables in BIOCOUPLY, which contains beside the identifier eleven further variables.

Variables of BIOCOUPLY

HHNR PERSNR SPELLNR SPELLTYP	Identifier of original sample household Personal identifier Consecutive spell number (chronological order) Partnership status (-3) Implausible (1) Married, spouse in household (2) Married, spouse not in household (3) Coupled, partner in household (4) Coupled, partner not in household (5) Single (6) Married, separated (7) Registered same-sex partnership, partner in household
	(8) Registered same-sex partnership, partner not in household(98) Unknown
	(99) Unit nonresponse
BEGIN	Year when spell begins [-3=implausible; -1=missing]
END	Year when spell ends [-3=implausible; -1=missing]
BEGINY	Age of respondent when spell begins [-3=implausible; -1=missing]
ENDY	Age of respondent when spell ends [-3=implausible; -1=missing]
PDEATH	Death indicator: spell ends with death of partner?
DIVORCE	Divorce indicator: spell ends with divorce?
CENSOR	Censoring information [0 to 14] (see explanation above)
SOURCE	Source of information
	(1) derived only from biography questionnaire
	(2) derived from biography and personal questionnaire
	(3) derived only from personal questionnaire
REMARK	 Further spell information (1) Original spell (2) Edited spell (3) Added spell (4) Gap Spell (5) First Spell

Variable SPELLTYP documents the partnership status with the possible categories listed above. Note that it was only asked for same-sex partnership since wave 28, thus, this information cannot retrospectively reconstructed for responds of the personal questionnaire. The state 'single' is not equal to the legal state 'never married'; it refers only to a person's current state of having a partner or not. 'Married, separated' spells apply only to former couples who are still married, i.e. who are separated but not yet divorced. It always overlaps with other spells that contain the actual couple status(es) over the entire separation episode and is therefore redundant in terms of completeness of couple histories. The additionally assigned codes 'implausible', 'unknown' and 'unit nonresponse' indicate implausibility or a lack of information for the respective period.

Variable SPELLNR is a chronological index number for each individual's spell during the observation period. Due to the fact that the spells' duration is measured in months via the personal questionnaire, it is important to note that an individual may encounter several events in the same year. In this case the variable SPELLNR allows the user to order spells with respect to the respondent's life course. The variables BEGINY and ENDY provide the years in which a spell begins and ends, whereas the variables BEGIN and END indicate respondent's age for users' convenience. In BIOCOUPLY, spell systems for each individual always start with the respondent's birth. The SPELLTYP of the first spell per definition is 'single'.

As SPELLTYP does contain missing values, so do BEGIN(Y) and END(Y), indicating that the exact year of change in the couple status is not known. Missing dates indicate that the year was either not reported (-1) (or especially for 'married, separated'-spells the event of divorce is not reported) or that the reported year of change is implausible (-3), i.e. contradictory to other information. In order to differentiate the reasons for missing information the user can utilize the variables REMARK and CENSOR.

Consistent with BIOCOUPLM the data file BIOCOUPLY also provides the indicator variables PDEATH and DIVORCE. PDEATH indicates whether a respective spell ends with the death of a person's partner, but is not restricted to married persons, thus does not only refer to widowhood. The states of widowhood can easily be derived from BIOCOUPLY by using the spells of marriage in SPELLTYP and checking for the death of the respective spouse in PDEATH (also BIOMARSM/Y contains the marital status and therefore information about widowhood). PDEATH of single spells are assigned a '(-2) does not apply'. DIVORCE works in a similar fashion, indicating whether the last marriage spell, that is the separated spell, ended in divorce. Hence, if it did not end in divorce it is coded as a still ongoing marriage. In this case END is updated by the year of the last interview.

Variable REMARK provides information on whether we had to edit or supplement original information given by respondents in order to construct consistent couple biographies. Spells in BIOCOUPLY are marked as 'edited' (in contrast to 'original') if the editing process involved substitution of reported information because of inconsistence with responses in previous or following interviews or information reported by a partner. Furthermore we have added spells, e.g. between two marriages because two marriages with separate persons at the same time are not legal (see later section for more details on editing); these spells are marked as 'added' or 'edited' first spells' and 'gap spells'. For BIOCOUPLY we also

generated a variable SOURCE, which contains information about whether the respective spell was generated on basis of answers to the biography questionnaire or / and of responses to the personal questionnaire.

The variable CENSOR indicates whether a spell is left-censored, right- censored or censored on both sides (see Table 2 above within the explanations on BIOCOUPLM). The coding furthermore provides information on the reasons of censoring. In principle, spells might be censored if they precede or follow a gap spell or if BEGIN or END is missing. The last spell for each person is marked as right-censored if a person is still in the SOEP and the current relationship status is open ('last spell').

6.6 **BIOMARSM: A monthly marital history**

Spells in data file BIOMARSM contain prospectively collected information on marital biographies starting with the information reported in the first personal interview. The data file comprises eleven variables: the case and individual identifiers HHNR and PERSNR as well as nine spell specific variables. Variable SPELLTYP documents marital status with the possible categories 'unmarried', 'married', 'divorced', 'widowed' and 'divorced or widowed'. Once married, a later spell 'not married' is not assigned anymore. Note that we renamed the known SOEP code '(1) single' to 'not married'. This is necessary to indicate that it is possible the respondent might have a partner anyway. If you are interested in this information, we recommend using BIOCOUPLM instead of BIOMARSM. Take also into account that we do not differentiate between marriages and registered same-sex partnerships for the SPELLTYP categories (3) to (6). SPELLTYP has one additional category 'divorced or widowed' which indicates that a marriage definitely ended though we do not know whether via divorce or death of the spouse. This may be due to missing information from the biographical questionnaires or due to a respondent's frequent shifts between both categories without ever reporting the death of the partner or divorce as an event. A sixth state is 'gap' indicating a lack of reliable data for this period.

Variables of **BIOMARSM**

HHNR PERSNR SPELLNR SPELLTYP	Identifier of original sample household Personal identifier Consecutive spell number (chronological order) Marital status (1) Unmarried (2) Married (3) Divorced / reg. same-sex partnership annulled (4) Widowed / reg. same-sex partnership deceased (5) Divorced or widowed / reg. same-sex partnership annulled or deceased (6) Married, separated / reg. same-sex partnership, separated (7) Living in reg. same-sex partnership (9) Gap
BEGIN END BEGINY ENDY CENSOR EVENTS REMARK	Month when spell begins[1=Jan 1983 to 384=Dec 2014]Month when spell ends[1=Jan 1983 to 384=Dec 2014]Year spell begins[1983 to 2014; -3=implausible; -1=missing]Year spell begins[1983 to 2014; -3=implausible; -1=missing]Censoring information [0 to 14] (see explanation above, Table 2)Month information: exact month of spell begin or end known?Further spell information(1) Original spell(2) Edited spell
	 (3) Added spell (4) Gap Spell (5) First Spell

Variable SPELLNR is a chronological index number for each individual's spells during the observation period. Variables BEGIN and END indicate the month in which a marital spell starts and ends. Monthly histories start with a value of 1 in January 1983 and ranges until the current margin in month 384, i.e., December 2014. In principle, the month in which a spell starts is the very same month the previous spell ends in. Please take into account that the months of BEGIN and END are not imputed when the exact month of the change in the familiar situation is not reported. Instead, in those cases the time of the interview is left as the BEGIN or END date when a change is observed in the data. To distinguish between these two cases we introduced a new variable called EVENTS, containing the information whether the exact month of the BEGIN or END of a spell is reported or not.

It is important to note that a 'first spell' in BIOMARSM is not the very first spell of a person, but the first observed marital status since the person is taking part in the SOEP. Accordingly, the first spell in BIOMARSM is almost always left-censored. Variable CENSOR informs about whether a spell is left- or right-censored and if so, why. Most spells in BIOMARSM are in fact censored. In order to provide the user with detailed information on the nature of censorship we distinguished 'left', 'right', and combined 'left- and right-censored spells' with respect to the reason for censoring: 'first spell' or 'last spell', 'spell ends with detail,' spell 'precedes' or 'succeeds a gap' (see Table 2 above within the explanations on BIOCOUPLM).

Of course, 'death' and 'last spell' are not mutually exclusive, thus we overwrite the latter with the former reason for being right-censored if the last interview is in the year of death or precedes it.

Variable REMARK provides information on whether we had to edit or supplement original information provided by respondents in order to construct consistent couple biographies. Spells in BIOMARSM are marked as 'edited' if the editing process involved substitution of reported information because of inconsistence with responses in previous or following interviews or information reported by a partner. Furthermore we have added spells, e.g. between two marriages because two marriages with separate persons at the same time are not legal (see later section for more details on editing); these spells are marked as 'added spells'. Finally 'first spells' and 'gap spells' are marked separately, whereas also 'added' or 'edited' first spells are marked as 'first spells'.

6.7 **BIOMARSY:** A annual marital biography

Data file BIOMARSY supplements BIOMARSM with retrospectively collected information on the marital history since a respondent's year of birth. Whereas the marital history in BIOMARSM is measured in months, BIOMARSY depicts the marital biography on an annual basis. In contrast to BIOCOUPLY the BIOMARSY data set contains also the respondents to the biography questionnaire before wave 28. Please note, that until wave 28 the biography questionnaire just asked for three previous marriages and therefore the number of reported marriages in BIOMARSY is limited.

The BIOMARSY file comprises eleven variables. The individual and household identifiers HHNR and PERSNR as well as SPELLTYP are basically the same in all data sets. Once married, a later spell 'not married' is not assigned anymore. Note again that we renamed the known SOEP code '(1) single' to 'not married' and take into account that we do not differentiate between marriages and reg. same-sex partnerships for the SPELLTYP categories (3) to (6). This is to indicate that it is possible the respondent might have a partner anyway. Like BIOMARSM, it is important to notice that SPELLTYP has one additional category 'divorced or widowed' which indicates that a marriage definitely ended, though we do not know whether via divorce or death of the spouse. This may be due to missing information from the biographical questionnaires or due to a respondent's frequent shifts between both categories without ever reporting the death of the partner or divorce as an event.

Variables of BIOMARSY

HHNR PERSNR SPELLNR SPELLTYP	Identifier of original sample household Personal identifier Consecutive spell number (chronological order) Marital status (1) Unmarried (2) Married (3) Divorced / reg. same-sex partnership annulled (4) Widowed / reg. same-sex partnership deceased (5) Divorced or widowed / reg. same-sex partnership annulled or deceased (6) Married, separated / reg. same-sex partnership, separated (7) Living in reg. same-sex partnership
BEGIN	(9) Gap Year when spell begins [-3=implausible; -1=missing]
END	Year when spell ends [-3=implausible; -1=missing]
BEGINY	Age of respondent when spell begins
ENDY	Age of respondent when spell ends
CENSOR	Censoring information [0 to 14] (see explanation above, Table 2)
SOURCE	Source of information
	(1) derived only from biography questionnaire
	(2) derived from biography and personal questionnaire
	(3) derived only from personal questionnaire
REMARK	Further spell information
	(1) Original spell
	(2) Edited spell
	(3) Added spell
	(4) Gap Spell
	(5) First Spell

Regarding the fact that duration of spells is measured in years it is important to notice that an individual may encounter several events in the same year. In this case the variable SPELLNR allows the user to order the spells with respect to a respondent's life course. The variables BEGINY and ENDY provide the years in which a spell begins and ends, while the variables BEGIN and END indicate for users' convenience the respective age of the respondent. The spell system for each individual in BIOMARSY always starts with the birth of the respondents. We thus created a first spell for each individual ever interviewed in the SOEP starting in the year of birth and continuing at least until the year in which a person turns age 16. The SPELLTYP of the first spell per definition is 'unmarried'. Even if a respondent reported an earlier marriage in the biography questionnaire we restricted its beginning to age 16, however, we marked the beginning of this spell as 'implausible'.

There are some missing values (-1 and -3) in BEGINY as well as in ENDY (resp. BEGIN and END) indicating that we do not know the exact year of a change in the marital status. This can have two reasons. First, it may simply indicate that the respondent did not report the year in which a marriage began or ended. In order to differentiate the reasons for missing information the user may utilize the variables REMARK and CENSOR. Second, within single case

corrections some dates are set 'implausible (-3)' if overlapping of marriages appear unsolvable or contradictions with the reported year and i.e. the year of death exist.

REMARK indicates whether a spell was 'edited' or 'added' in the same way as in BIOMARSM (see above). Variable CENSOR indicates if a spell is left or right censored or censored on both tails. The coding of CENSOR (see Table 2 above) provides also information about the reasons for censoring. In addition to what was said before about gap spells in BIOMARSM, gaps or missing values in BEGIN or END may appear in BIOMARSY if a respondent reported a terminated first marriage and the beginning of a second marriage, but did not report the reason for and/or the year of the end of the first marriage. The last spell of each person is marked as right censored, irrespective that the person died, quit the SOEP or is still married currently.

7 BIOBIRTH: A Data Set on the Birth Biography of Female Respondents¹

by Christian Schmitt

7.1 Population and purpose of the data set BIOBIRTH

The file BIOBIRTH provides information on fertility histories of adult respondents in the SOEP. Until 2014 (wave BD) the data was stored in two separate files: BIOBIRTH containing female fertility histories, and BIOBRTHM providing male fertility histories. It is important to note that the latter file only records the male fertility histories for respondents who entered the SOEP in 2001 or later (for more details see below). Since 2015 (wave BE) all fertility histories of new respondents as well as the old and continuously updated data of the fertility histories collected in BIOBIRTH (until 2014) and BIOBRTHM (until 2014) are stored in a single file - BIOBIRTH (this naming is identical to the previous fertility histories of women). The variable SEX (distinguishing male and female respondents) is added to the BIOBIRTH dataset since wave BE. Moreover, the file BIOBIRTH is also supplemented with the fertility histories of the "Familien in Deutschland" (FiD) panel survey, which was integrated into the SOEP data-base in 2015. Records from the FiD subsamples can be distinguished by inspecting the variable BIOVALID. For more details on integration and extension procedures see below.

Fertility histories in BIOBIRTH provide information on every woman (as well as every man with a panel entry since 2001) who has ever provided at least one successful SOEP interview. Note that the data is right censored for respondents who left the panel early in their fertile lifephase and it is left censored for persons who entered the SOEP at higher ages *without* ever filling in a biographical questionnaire. The variable BIOVALID provides information on whether individual level information is based merely on information derived from household composition and family relations, or on biographical questionnaire data. The variables EINTRITT and AUSTRITT in ppfad (panel entry and exit) provide information on censoring (left-censoring can be ignored if a biographical questionnaire exists for a given person)

For each of the mentioned adult respondents BIOBIRTH documents the fertility history. The annual update focuses on including new information on becoming a biological parent as based on data collected with the individual or the biographical questionnaire, respectively. Furthermore adults who have been interviewed for the first time but who have not yet provided information on their fertility histories are included. The latter case applies to either new adult household members, or teenagers who have reached the required minimum for a participation in the personal questionnaire (16 years). BIOBIRTH constitutes an accumulative data set, in which the entire birth biography of all SOEP respondents is presented.

7.2 Structure of the data set

BIOBIRTH covers the following information:

- (1) Person identifier (PERSNR), respondent's year of birth, status information on the origin of the included data, number of children derived from fertility histories, total number of children derived from fertility histories *and* subsequent consideration of changes in household structure up to the last date of interview.
- (2) A sequence of 15 variables relating to 1 out of 15 children, including child's person identifier (KIDPNR[nn], provided the child could be identified within the SOEP's household structure), child's sex, child's year of birth, child's month of birth.

BIOBIRTH contains the following variables for all adult women (and men since 2001):

- HHNR Invariable number of the original household
- PERSNR Invariable personal identifier of the respondent
- SEX Respondent's sex
- GEBJAHR Respondent's year of birth
- BIOVALID Status of the birth biography: (Please mind: The codes in the variable BIOVALID have been extended in 2015 (wave BE)).

10: no birth biographical entries

- 20: youth biography questionnaire, no fertility histories on children
- 30: birth biography questionnaire, no children in fertility history
- 31: birth biography questionnaire, one or more children in fertility history
- 40: FiD: no birth biography, no data on children
- 41: FiD: no birth biography, information on existing children in FiD parent/couple questionnaire
- 50: FiD: birth biography questionnaire, no children in fertility history
- 51: FiD: birth biography questionnaire, one or more children in fertility history.
- BIOYEAR Survey year when birth biography questionnaire was completed (1985ff.). Code "-2" is assigned if the respondent never completed a birth biography questionnaire.
 - BIOAGE Age of the woman at the time of the birth biography survey. Code "-2" is assigned if the respondent never completed a birth biography questionnaire.

- SUMKIDS Total number of children born (more precisely: total number of children identifiable within SOEP by merging all available data up to the time of the last observation (SUMKIDS=BIOKIDS+subsequent births during panel participation).
- BIOKIDS Total number of children identified in the birth biography. Code "-2" is assigned if the respondent never completed a birth biography questionnaire.
- KIDGEB[nn] Year of birth of the child [nn] (for the first child up to the fifteenth child).
- KIDSEX[nn] Sex of the child [nn] (for the first child up to the 15th child).
- KIDPNR[nn] Personal number of the child [nn] (for the first child up to the 15th child), given it is identifiable in the SOEP.
- KIDMON[nn] Month of birth of a child [nn] (for the first child up to the 15th child).

With respect to the variables KIDGEB[nn], KIDSEX[nn], KIDPNR[nn], and KIDMON[nn] identical missing codes apply: The code "-2" is assigned if there's no [nn]th child identified for a mother/father. The code "-1" applies if an [nn]th child can be identified but the information on the birth year and/or sex and/or personal identifier is unavailable, or if it could not be identified.

For every respondent a maximum of up to 15 children are considered. The sequence of children within BIOBIRTH is recorded with regards to the birth order in terms of age of the children. The order ranks from the oldest child specified under KIDPNR01 to the youngest child. If the age is missing it is listed in the first record (KIDPNR01), and in subsequent records following KIDPNR01 if more than one child's personal identifier remains missing.

7.3 Information basis of the birth biography

The main basis of the individual fertility history considered in BIOBIRTH is the information collected with the biography questionnaire², in which the number, birth year and sex of the biological children for every adult respondent are collected. For adults with information on children stemming from the biography questionnaire the BIOVALID code "31" is assigned. Women who completed this questionnaire, but did not report any biological children receive the code "30". In correspondence to this, the samples of the FiD panel integrated into the

 $^{^{2}}$ The information collected over the course of the biography survey for every adult contains the number of children, the year of birth, the sex, residence status of the child, and, if applicable the year of death of the biological child. The biography data is stored in wave specific files (\$LELA), which are not provided with the SOEP distribution.

SOEP since 2015 (wave BE) contribute the codes 50 and 51 for respondents with biography questionnaires with, or without children, respectively. Codes 10 and 40 correspond accordingly for SOEP and FiD data. 41 is a qualitatively new code for parents in the FiD who did not fill in the birth biography but who have provided reliable information on their status as a parent in other sources of FiD (this relates to specific questions in the FiD parent and couple questionnaire).

A minority of respondents did not provide any information on fertility histories by filling in the biographical questionnaire for several reasons³. For these cases the variable BIOVALID is assigned the code 10 (original SOEP samples), and 40 (new FiD subsamples), respectively. This group is subject to a risk of underestimating the total number of births, particularly since births prior to the entry into the SOEP cannot be identified unless current household structure provides substantive evidence, usually reflected by parent-child co-residence. Respondents without a valid fertility history (codes 10 and 40) can be distinguished in three major groups:

- Respondents who were 16 years of age at the time of the first interview. In most cases these respondents participate in the biography survey at a later date. Thus, the parent-child relationship recorded earlier in BIOBIRTH (as based on household structure) can be verified and supplemented with data on their fertility histories at a later date.
- Respondents who were at about 30 years of age or younger at the time of first interview. In this sub-population, children are not yet adults and still reside in the parental home in most cases. Since information from the biographical questionnaire is missing, a final distinction in social and biological children is difficult particular for records considered in earlier SOEP waves when the intra-household relationships (\$STELL) were less refined, compared to the recent setup. Hence these older records have a higher likelihood of misspecifying a social as a biological parent-child relationship.
- Respondents who were well over 30 years of age at the time of the first interview. In these cases some of the children are likely to already have left the parental home, and therefore are no longer part of the survey population. For that reason, the number of biological children might be underestimated in this group of respondents to a larger extent as compared to younger women.

7.4 A new source of biographical information – the youth questionnaire

From wave T onwards the data within BIOBIRTH includes information of a further biographical instrument: the youth biography. The youth-questionnaire has been in circulation since the year 2000 (wave Q) for all young adults, one year after they have reached the required age for completing the individual-questionnaire. Apart from exceptions described in

table 1, this means the age of 17. What is important for the BIOBIRTH data-set is that these individuals who fill in the youth-questionnaire complete this questionnaire *instead* of the biographical questionnaire. The age groups which instead fill in the youth-questionnaire of the biographical module differ slightly among the SOEP-subsamples (table 1):

sample	2000	2001	2002	2003 and later
A-E	17 years	17 years	17 years	17 years
F		17-19 years	17 years	17 years
G, H, I, J, K, M				17 years

 Table 1:
 Target population of the Youth Questionnaire by year, sample and age

The youth-biography does not contain any birth-biographical modules. Assuming that only very few women give birth before the age of 17 and these few can be identified in the household context (as long as they remain within the SOEP), this does not pose any problem for compiling the birth-biography of the respondents. Nevertheless, a few changes to the BIOBIRTH data-set have to be outlined:

- In the variable BIOVALID a new code ("20": "youth biography questionnaire completed") is added. As the youth questionnaire doesn't contain any information about own children the addendum "no children in biography" is always added to the code "20".
- While calculating the age at the time of the biographical questionnaire (BIOAGE), the age upon completion of the youth questionnaire is applied.
- The variable BIOKIDS always remains at zero as no biographical information on parenthood can be derived from the youth-biography (in this cases no missing code is applied in BIOKIDS).

7.5 The fertility histories of male respondents in BIOBIRTH

Since 2001 the fertility histories of male respondents are collected with the SOEP survey and have been integrated in a special data set BIOBRTHM since 2003 (wave T). Since 2015 (wave BE) this data is merged with the female fertility history and collected in the file BIOBIRTH, while the variable SEX distinguishes between the fertility histories of men and women. Contents and updating procedures for male fertility histories are identical to those of their female pendants with two important exceptions:

- First: only information about men with at least one completed questionnaire *in 2001 or later* is considered in the BIOBIRTH file.
- Second: information from the birth-biography will only be added for *new* panel members who joined since 2000, as only these persons fill in a new biography interview (usually one

wave after the first participation in the SOEP which in our case means in 2001 or later). Most of the members who have completed a questionnaire before 2000 have also already completed the biographical modules that are only collected once for every person.

The module collecting information on male fertility histories was introduced in 2001. Therefore, most men in subsample "F" (which started in 2000) have completed the birthbiography, since biographical questionnaires are usually completed one wave after the starting wave with only a marginal rate of non-response for this life-course related questionnaire. Note that for men within BIOBIRTH who did not complete a biography questionnaire (BIOVALID code 10), the information about fatherhood is underestimated as only the context of the household is available to determine the respondents biological children. Underestimation of this type is generally more severe for men than for women, since children have a distinctively higher likelihood to co-reside with their mothers after separation, in which case a father will appear to be childless, thus leading to a misspecification as being childless.

7.6 Integration of "Familien in Deutschland" - FiD

In 2015 (wave BE) data on respondents from the "Familien in Deutschland" (FiD) panel survey was integrated into the SOEP data-base. While the design of this survey was oriented on a close congruence to the SOEP questionnaires and data structure, FiDt introduces some additional information. The focus of the FiD survey was put on couples, families and lone parents. As a consequence, there is even more information on parent-child relationships compared to the original SOEP samples. Hence the derivation of parent-child relationships is quite reliable for the FiD subsamples (see variable PSAMPLE in the file PPFAD for a distinction). Almost all adult respondents completed a specific biographical questionnaire including data on their fertility histories. These respondents were assigned BIOVALID codes 50 (without children), and 51 (with children). Additionally, particular questions in a couple, as well as a parent-child-questionnaire provide data on biological children. Hence, the original BIOVALID code 10, which corresponds to the code 40 for the FiD population, shows only few case numbers, while a new code 41 was introduced for parents, who lack detailed information on their fertility histories, but which provide data on children in FiD's couple or parent questionnaire. For the update of the BIOBIRTH population and data in subsequent waves, the FiD population will be treated identical to any other of the SOEP subsamples (see 1.10 in particular).

7.7 Identification process of the children in the SOEP data base

The starting point for the process of identifying children is the relationship of a household member to the head of the household (HH) (variable \$STELL in the file \$PBRUTTO). The variable \$STELL has the following codes:

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Code Label

- 0 head of the household (HH)
- 1 spouse of HH
- 2 "life companion" of HH
- 3 daughter / son (including adopted/step-children) of HH
- 4 foster child of HH
- 5 daughter in law / son in law of HH
- 6 father / mother of HH
- 7 father in law / mother in law of HH
- 8 brother / sister / brother in law / sister in law of HH
- 9 grandchild of HH
- 10 other relation to HH
- 11 not related to HH
- 12 child of "life companion" of HH (included since 1999)

However, there are only certain combinations among household members in which a biological parent-child relationship among a female adult and another person can be assumed.

\$STELL of the		Potential parent-child relationship		
woman	another person	In this case the person is the		
0	3	Child of reference person (reference person = head of he household)		
1	3	Child of the wife of reference person		
1	11	Child of the wife of reference person, but not child of reference person		
1	12			
2	3	Child of "life companion" of reference person and of reference person		
2	11	Child of "life companion" of reference person but not of reference person		
2	12			
3	9	Child of daughter of reference person		
4	9	Child of foster child of reference person		
5	9	Child of daughter in law of reference person (3 generation household)		
6	0	Child is reference person, lives with his mother/father in the same household		
6	8	Child is the sister / brother of reference person, the siblings live with their mother/father in the same household		
7	1	Child is spouse of reference person and lives together with spouse and mother/father in the same household		
7	8	Child is daughter / son of the mother/father in law of reference person, but not the spouse of the reference person rather the sister in law / brother in law of reference person		
8	10	Child is niece / nephew of reference person, parent is sister / sister in law of reference person		
9	10	Child is another relation to reference person, great grandchild of reference person		
10	10	Mother/father and child have another relation to reference person		
11	11	Child and mother/father are in no way related to reference person		

Table 1:Potential parent-child relationships as a combination of the variable \$STELL

With SOEP wave 29 a more complex representation of the variable \$STELL in the file \$PBRUTTO has been implemented, describing the following types of relationships to the head of household:

Code	Label
0	Head Of Household
11	Spouse Of HH Head
12	Same-Sex Spouse
13	Life Partner
21	Son, Daughter
22	Stepchild (Child of the Partner)
23	Adoptive Child
24	Foster Child
25	Grandchild
26	Great-Grandchild
27	Son, Daughter-In-Law
31	Father, Mother
35	Parent-In-Law
36	Grandparents
41	Brother, Sister
42	Half-Brother, Half-sister
43	Stepbrother, Stepsister
52	Brother, Sister -in Law (brother/sister of spouse)
61	Aunt, Uncle
62	Niece/ Nephew
63	Cousin/Cousine
64	Other Relative
71	Others

Based on these new representations of relationship patterns considered since wave BC, the algorithm, scanning for potential parent-child dyads has been adjusted and implemented in generating the birth-biographical information that relies solely on the household composition. It should be noted that the majority of parent-child relations provided with the BIOBIRTH biography file are still derived from personal information given in the biographical corequestionnaires (see below).

7.8 Identification of the children of parents with completed fertility histories

If a parent mentions either the existence of biological children, the year of birth of a child, the sex of a child or co-residence with this initiates a process of identification. In the first step, the algorithm scans the current household structure and aims to determine the parent's relationship to the reference person and scans potential combinations of parent child relationships within the current household structure. The principle is the same as outlined above (1.6). The goal is to supplement the biographical information on sex and year of birth of a child with a personal identifier, thus enabling more complex analyses of parent-child interaction for the researcher. If a fit is determined between the year of birth and the sex of a potential child in birth biography and household, the individual is considered as the child of the respondent and the child's personal identifier is assigned. Since the majority of the households with children present small nuclear families including one potential mother/father, this kind of identification process is broadly sufficient. In other, rather complex households a careful hand editing is condcted, in order to identify the 'right' child to the 'right'

mother/father. The same is done, if the sex or the year of birth of a child mentioned in the biography questionnaire is unspecified, i.e. missing.

In the case of a successful identification the variable KIDPNR[nn] is been filled with the person identifier of this child. Children, for whom the parent in the biography questionnaire has reported that they were deceased or had moved out, are assigned the personal number (KIDPNR[nn]) "-1", for missing information, in BIOBIRTH.

7.9 Identification of the children for women who have no biography data/ not completed the biography questionnaire

To get as close as possible to the definition of a biological child, for this group of parents only, specific relationships among household members are considered. Since the key information from the biography questionnaire is not available, a careful analysis of the composition and the history of the household in which the children live is conducted in order to assign proper parent-child linkages.

7.10 Updating BIOBIRTH

As mentioned in section 6.1 the annual update of the data set BIOBIRTH is examined with respect to two dimensions. First, updating the birth biography of the BIOBIRTH population and second, extending BIOBIRTH by new persons. The latter are either new adult respondents joining the household or teenagers who have reached the required age for giving a first interview (16 years). Since the extension of BIOBIRTH follows the generation rules as described above, the following only summarizes the updating of the BIOBIRTH population.

New-born children in the SOEP study are documented in the variable \$PZUG in the data set \$PBRUTTO:

Code	Label
11	Born since the last survey
17	Born before the last survey, but only now first mentioned
31	Born two years ago

For this group of new born children the parent-child ties are investigated by the same algorithm which has been described in section 1.6. The general logic of updating the BIOBIRTH birth biography follows this pattern:

- 1) New information from household composition (basis \$STELL) updates older information contained in BIOBIRTH (i.e. new-born children, or children moving into the household or otherwise observed in the SOEP for the first time).
- 2) New or first time information from the biographical questionnaire is displayed as core part of the parent child-ties in BIOBIRTH, or replaces older household-based information contained in BIOBIRTH, in case household structure-based data is inconsistent with the data from the biographical questionnaire.
- 3) New information, derived from household composition (basis \$STELL), may not replace earlier information in BIOBIRTH, in case the previous information on children stems from the biographical questionnaire, and the two sources cover the same period and are inconsistent. In other words: information from the biographical questionnaire always overrides household information.

Overview: central variables in the file BIOBIRTH (Version 2015 / up to Wave BE)

		Frequency	Percent	Cumulative Percent
Valid	10 No Birth Biography - No Kids			
	From Bio	11154	15,84	15,84
	20 Youth Biography - No Kids From			
	Bio	4904	6,96	22,81
	30 Birth Biography - No Kids From			
	Bio	15396	21,87	44,67
	31 Birth Biography - Kids From Bio			
		27910	39,64	84,31
	40 FiD: No Birth Biography			
		1071	1,52	85,83
	41 FiD: Parent/Partner			
	Questionnaire – Data on Kids	883	1,25	87,09
	50 FiD: Birth Biography - No Kids			
	From Bio	642	0,91	88
	51 FiD: Birth Biography - Kids From			
	Віо	8451	12,00	100
	Total	70411	100,0	

Biovalid

Year of Biography Survey	Frequency	Percent	Cumulative Percent
-2	13108	18,62	18,62
1985	6619	9,4	28,02
1986	83	0,12	28,13
1987	104	0,15	28,28
1988	220	0,31	28,59
1989	211	0,3	28,89
1990	202	0,29	29,18
1991	161	0,23	29,41
1992	2635	3,74	33,15
1993	230	0,33	33,48
1994	592	0,84	34,32
1995	528	0,75	35,07
1996	255	0,36	35,43
1997	231	0,33	35,76
1998	203	0,29	36,05
1999	1033	1,47	37,52
2000	361	0,51	38,03
2001	9429	13,39	51,42
2002	899	1,28	52,7
2003	2691	3,82	56,52
2004	822	1,17	57,69
2005	667	0,95	58,63
2006	530	0,75	59,39
2007	2576	3,66	63,04
2008	594	0,84	63,89
2009	438	0,62	64,51
2010	9597	13,63	78,14
2011	6908	9,81	87,95
2012	3227	4,58	92,53
2013	651	0,92	93,46
2014	4606	6.54	100,00
Total	70411	100,0	

BIOYEAR Year of Biography Survey

Total Number of Children Born	Frequency	Percent	Cumulative Percent
0	25127	35,69	35,69
1	13416	19,05	54,74
2	19159	27,21	81,95
3	8544	12,13	94,08
4	2717	3,86	97,94
5	853	1,21	99,15
6	318	0,45	99,61
7	136	0,19	99,8
8	75	0,11	99,91
9	30	0,04	99,95
10	18	0,03	99,97
11	9	0,01	99,99
12	7	0,01	100
16	2	0	100
Total	70411	100.00	

SUMKIDS Total Number of Births

BIOKIDS Number of Births from Biography

Births from Birth Biography Questionnaire	Frequency	Percent	Cumulative Percent
-2	13108	18,62	18,62
0	20942	29,74	48,36
1	10793	15,33	63,69
2	15105	21,45	85,14
3	7008	9,95	95,09
4	2236	3,18	98,27
5	689	0,98	99,25
6	276	0,39	99,64
7	128	0,18	99,82
8	69	0,1	99,92
9	31	0,04	99,96
10	15	0,02	99,98
11	5	0,01	99,99
12	4	0,01	100
16	2	0	100
Total	70411	100.00	

8 **BIOTWIN: TWINS in the SOEP**

by Christian Schmitt

8.1 Population and contents of the data set BIOTWIN

The file BIOTWIN contains all twins that were ever identified within the SOEP. To be classified as a twin, a person is required to:

- have exactly the same age as his or her sibling (year & month of birth),
- have a relationship to the head of the household that indicates that he or her and a second persons are siblings, and
- have the same mother (as far as a pointer to the mother is available).

Furthermore, it is not only twins that are recorded in the BIOTWIN data set, but also triplets or quadruple siblings. The following variables are stored within the BIOTWIN data set:

- HHNR Invariable number of the original household.
- PERSNR Invariable personal identifier of the first sibling .
- PNRTWIN Invariable personal identifier of the second sibling, the twin.
- PNRTRIP Invariable personal identifier of the third sibling.
- PNRQUAD Invariable personal identifier of the fourth sibling.
- PNRMOTH Pointer to the personal identifier of the mother of the twin-group.
- BIOMONOZ Monozygotic group? Information if the group is monozygotic.
- INFSOURC Source of information from which the status of being a twin is derived

The central variable PERSNR is assigned to the sibling with the lowest personal identifier in the twin group. The PNRTWIN and – in rare cases if available – PNRTRIP or PNRQUAD contain the personal identifier of second, and third or fourth sibling in the group. This means that every case in the data set consists of a *group* of twins (or triplets or quadruplets). The code "-2" is assigned to PNRTRIP and/or PNRQUAD if a third or fourth twin sibling doesn't exist. PERSNR and PNRTWIN however should always contain valid codes.

The variable PNRMOTH provides the link to the mother of the group and is derived from the data sets KIND (reference to this KIND was discontinued in with wave Z / 2009) and/or BIOBIRTH.

8.2 The twin survey of 2006

In 2006, a questionnaire was distributed among all households with potential twin groups, identified up till then. The aim was to validate that none of these twins had been identified by mistake. The variables INFOTWIN and BIOMONOZ contain new information which was derived from this survey.

The result of the survey could widely validate the selection of the twin population, contained in the BIOTWIN data set of the SOEP. More than 80% of households with potential twins as of 2006 could be contacted and were interviewed in the twin survey. Among these only 3 groups of twins turned out to be identified erroneously (those false positives were removed from the BIOTWIN data set). Thus the algorithms of identifying twins within the SOEP could prove to be widely reliable. Additional information that was collected with the twin survey contributed to identifying a number of mothers of twins, for whom the mother-child-link was missing previously. Furthermore the twin survey provided additional information on monozygotic respectively dizygotic twins. The variable BIOMONOZ was extended, in order to reflect this additional information (see below for more details).

8.3 Construction of variables in the data set BIOTWIN

The variable BIOMONOZ¹ indicates if the group is monozygotic. If the information could be validated in the twin-survey in 2006 the code is set to 1 for monozygotic twins and 2 for dizygotic twins. If the information on being mono- or dizygotic twins could *not* be validated in the twin survey, which was carried out in 2006, the code is set to 0 if the sex of all the siblings is identical, and this group thus *might* be monozygotic. Please pay attention to the fact that the labels and values of the variable BIOMONOZ from wave W onwards are not consistent with values and labels from previous waves.

The variable INFOTWIN is introduced with wave W and provides information on the source from which the status of being a member of a twin group is derived from and whether this information could be validated in the twin-survey in 2006.

¹ This variable existed before wave W but was restructured to reflect the additional information which became available with the 2006 twin questionnaire.

INFOTWIN can take the following characteristics:

- 1 Generated up to 2006 basis: household co-residence, identical parent, year & month of birth not validated by in the twin survey 2006
- 2 Possible Twin or Triplet Information not revisable in twin survey 2006
- 3 Possible Twin or Triplet –Answer refused in twin survey 2006
- 4 Twin or Triplet Information validated by twin survey 2006
- 5 Twin or Triplet New since 2006 (congruent year & month of birth)
- 6 Twin or Triplet New since 2006 (congruent year of birth / missing month of birth)

The selection of twins within the SOEP, which compiles the data set BIOTWIN, is based on the either the month of birth, or an identical year of birth. Priority is given to congruent months of birth, as a woman might – in rare cases – give birth at two different times in a year. Hence the month of birth plays a central role in identifying potential twin-groups. According to that logic people with a) valid month of birth information or b) identical month of birth, or c) with an identical year of birth *and* missing data on the month of birth among both siblings are classified as twins.

In a second step, the relationship of these potential twins to the head of household is scanned (\$STELL). If the relationship of both persons assures that they are siblings, then they are assumed to be twins.

In a third step the pointer to the mother is checked for both siblings with focus on the files \$kind / BIOBIRTH. If this maternal link is identical for both siblings, it is transferred into the variable PNRMOTH.

An overview over central information in the file BIOTWIN (Version 2013 / Wave BC)

Table 1:Siblings in BIOTWIN²

Sibling type	n	Valid mother pointers
Twins	1,342	1,210
triple	48	48
Quadruple	4	4

Table 2: BIOMONOZ Gender Combination Of Siblings

		Frequency	Percent	Cumulative Percent
Valid	0 Possibly Identical Twins	701	50,29	50,29
	1 Definitely Identical Twins	46	3,3	53,59
	2 Definitely Fraternal Twins	647	46,41	100
	Total	338	100,0	

Table 3: INFOTWIN Twin Status: Source of Information

		Frequency	Percent	Cumulative Percent
Valid	1 Generated - not in twinsurvey	45	3,231	3,23
	2006			
	2 Twinsurvey 2006 (answer not	73	5,24	8,46
	verified)			
	3 Twinsurvey 2006 (answer	2	0,14	8,61
	refused)			
	4 Twinsurvey 2006 (answer	196	14,06	22,67
	validated)			
	5 Gen. since 2007 (basis: year	687	49,28	71,95
	of birth & month)			
	6 Gen. since 2007 (basis: year	391	28,05	100
	of birth / month miss)			
	Total	1,394	100,0	

 2 Please note: sibling groups contribute observations for each individual of the twin-pair/triplet, that is – a pair of twins would provide two entries to the data set, one for each twin.

9 BIOSIB: Information on siblings in the SOEP

by Daniel D. Schnitzlein

9.1 General description of the data set

BIOSIB provides information on siblings living within the SOEP households. The data set contains the person numbers of all siblings in an observed family. It includes information on their sex, their year of birth, the number of siblings, the individual's position within the birth order, and on the relationship between the observed siblings.

9.2 Sources of information on siblings in the SOEP

Information on siblings in the SOEP is available from three sources:

- First, the respondents are asked about their siblings in the biography questionnaire and the youth questionnaire. This information (for example *have or ever had siblings yes/no, number of sisters, number of brothers*) is stored in the file BIOPAREN (for detailed information please see the chapter on BIOPAREN).
- Second, in the years 1991, 1996, 2001, 2006, 2011 and 2013 all respondents were asked about their family relations. Among other questions on their family, the individuals were asked about their siblings (like above, *have or ever had siblings yes/no, number of sisters, number of brothers*) outside the SOEP household in 1991, 1996 and 2001. From 2006 on they were asked about all siblings within and outside the household. The information from these questions is stored in the \$\$p-files.
- Third, siblings within the SOEP households are observed directly. The aim of this file is to provide the never changing person ID of the siblings of each respondent as far as they can be identified in the SOEP. With this information it is possible to use the whole range of personal or household information for each sibling to carry out detailed sibling analyses. This file therefore adds to the information in BIOTWIN (for details see chapter on BIOTWIN), which provides the person IDs for all twins in the SOEP.

9.3 Overview on the number of siblings in BIOSIB

Figure 1 gives an overview on the information stored in BIOSIB. The data set contains 13,277 families with 33,350 individuals that have at least one sibling identified in the SOEP. 16,889 of them have one sibling, 10,282 have two siblings, 3,837 have three siblings, 1,334 have four SOEP Survey Paper 312

siblings and 976 have five or more siblings identified in the data. As is apparent from Figure 1 in all cases most of the siblings are identified by having the same mother and the same father (for more details about the identification of siblings and the identification of biological siblings please see the description to SIBDEF1-SIBDEF11 on the subsequent pages).

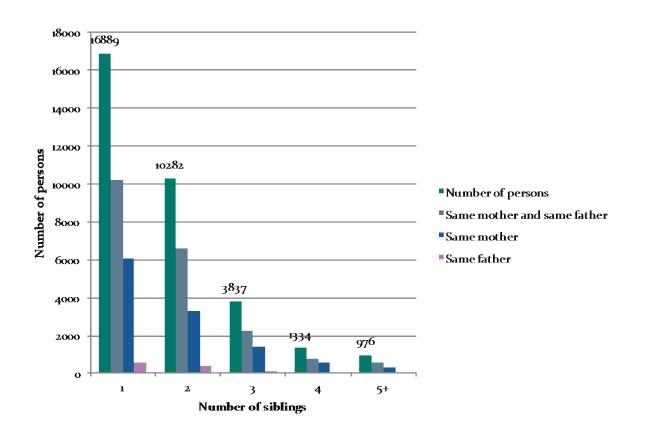


Figure 1: Number of persons with information on their siblings, by number of siblings

Source: own calculation, based on SOEPv31.

9.4 Organization of the data in BIOSIB

Each row in the dataset represents one individual for which at least one sibling could be identified. Therefore a family with three siblings appears three times in BIOSIB, one time for each child. The person IDs of the siblings are ordered by birth order starting with the oldest sibling.

List of variables

HHNR	Original Household Number
PERSNR	Never Changing Person ID
SIBPNR1 – SIBPNR11	Person Number of $1^{st} - 11^{th}$ Sibling
SIBDEF1 – SIBDEF11	Sibling Relation to $1^{st} - 11^{th}$ Sibling
FAMCOUNT	Family Counter
POS_SIB	Position in the birth order
NUM_SIB	Number of observed siblings in the SOEP
SEX	Gender of Individual
GEBJAHR	Year of Birth of Individual
SEXSIB1 – SEXSIB11	Gender of $1^{st} - 11^{th}$ Sibling
GEBSIB1 – GEBSIB11	Year of Birth of $1^{st} - 11^{th}$ Sibling

The variables HHNR, PERSNR, SEX, GEBJAHR, SEXSIB1-SEXSIB11 and GEBSIB1-GEBSIB11 are generated from the information stored in PPFAD. The newly generated variables SIBPNR1-SIBPNR11, SIBDEF1-SIBDEF11, FAMCOUNT, POS_SIB, and NUM_SIB are described on the next pages.

SOEP v.31 and v31.1

Variable	SIBPNR1 – SIBPNR11				
Label:	Person Number of 1 st -11 th Sibling				
Values:	(-1) No answer				
	(-2) Does not apply				
	(-3) Answer improbable				
Description:	The variables provide the never changing person II				
	the individual identified by PERSNR. The sib				
	generated from the parent information in BIOBIRT				
	BIOPAREN (for detailed information on these				
	relevent chapters showe). Two persons are define				

Description: The variables provide the never changing person IDs for the siblings of the individual identified by PERSNR. The sibling relationship is generated from the parent information in BIOBIRTH, BIOBRTHM and BIOPAREN (for detailed information on these files please see the relevant chapters above). Two persons are defined as siblings if they report both, the same mother and father, only the same mother, or only the same father. This information on the sibling relationship is stored in SIBDEF1-SIBDEF11.

In the case of inconsistent information on parents in BIOBIRTH and BIOPAREN, BIOPAREN was assigned the lowest priority.

Please note, that BIOPAREN uses a social definition of parenthood based on cohabitation. In contrast, BIOSIB contains both biological (BIOBIRTH/BIOBRTHM) and social siblings with a higher priority on biological relations.

Variable	SIBDEF1 – SIBDEF11
Label:	Sibling Relation to 1 st -11 th Sibling
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
	(1) Same mother (B); same father (B)
	(2) Same mother (B); same father (nB)
	(3) Same mother (nB); same father (B)
	(4) Same mother (nB); same father (nB)
	(5) Same mother (B)
	(6) Same mother (nB)
	(7) Same father (B)
	(8) Same father (nB)

Description: The variables provide the information on the sibling relationship between the individual identified by PERSNR and the respective sibling. Two siblings can have either, the same mother and the same father, only the same mother, or only the same father. The indicator further provides information if the identified parent is a biological (B) (indicator from BIOBIRTH) or non-biological parent (nB) (indicator from BIOPAREN). So for example, variable value (1) indicates that the two individuals share the same biological mother and the same biological father.

Variable	FAMCOUNT
Label:	Family Counter
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
Description:	The variable contains a non-systematic counter of families occurring in
	BIOSIB. All siblings (biological and non-biological), who belong to
	one family, are assigned the same value of FAMCOUNT. The variable
	can be used, for example, in multilevel analyses to define the family
	level.
	Note: In the case a family splits up, children from the new partnerships
	of the parents are no siblings. Children of the early partnerships are
	siblings to all children in the new partnership.

Variable	POS_SIB
Label:	Position in birth order
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
Description:	The variable contains the individual's position in the birth order of the
	observed siblings (biological and non-biological).

Variable	NUM_SIB
Label:	Number of siblings observed in SOEP
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
Description:	The variable contains the total number of identified siblings, including
	the respondent, in the SOEP (biological and non-biological).

10 BIOAGE01, BIOAGE03, BIOAGE06, BIOAGE08, BIOAGE10, BIOAGE12: Generated variables from the "Mother & Child", "Parent", and "Pupils" questionnaires

by David Richter¹

10.1 Introduction

The bioage data files are generated using information collected in the "Mother & Child" and "Parent" questionnaires. In 2014, for the first time, the children themselves answered the "Pupils" questionnaire. In addition, the data from the Families in Germany (FiD) study was integrated into the SOEP in 2014 as well. There are six different "Mother & Child" and "Parent" questionnaires and one "Pupils" questionnaire (see Table 1). Two additional questionnaires (biage02 and bioage10b) were only surveyed in FiD but are integrated into the *bioagel* data set, too.

Bioage	Classification by Age	Respondents	First Wave
Bioage01	0-1 years old	Mothers only	2003
Bioage02 (FiD only)	1-2years old	Mothers only	2010
Bioage03	2-3 years old	Mothers only	2005
Bioage06	5-6 years old	Mothers only	2008
Bioage08a	7-8 years old	Parent 1	2010
Bioage08b	7-8 years old	Parent 2	2010
Bioage10	9-10 years old	Parent 1 (SOEP & FiD)	2012 / 2010 (FiD)
Bioage10b (FiD only)	9-10 years old	Parent 2 (FiD only)	2010
Bioage12	11-12 years old	Children	2014

Table 1: Overview of bioage data, corresponding age group, and respondents

The "Mother & Child", "Parent" and "Pupils" questionnaires aim to follow and observe future generations of the SOEP and collect all information in age-specific files, even though the data come from different survey years. As we try to make this process as comprehensive and gap-free as possible, we begin following and documenting the development of children in SOEP households from birth onwards. Since many questions overlap, all bioage data files are covered in this chapter, rather than dedicating a separate chapter of this document to each

¹ This documentation is based on earlier versions of documentation materials on bioage data sets and has benefited from previous work by Sebastian Frischholz, Anne Fromm, Stefanie Lenuweit, Katharina Mahne, Christian Schmitt, and Jürgen Schupp.

bioage data file. By doing so, we are able to provide you with an overview of all variables covered in the bioage data files.

Starting with the v31 data distribution, all available data is now provided in one data set: *bioagel*. The separate bioage data files are no longer part of the data distribution.

10.2 Respondents in the 'Bioagel' Data Set

The values of the BIOAGE variable in the *bioagel* data file reflects the age of the children when the respective questionnaire was taken by their parents (e.g., *bioage* = 6 covers children who turned six that survey year, producing a range in ages between 5 years and 1 month and 6 years and 11 months, depending on the birth month and interview month). For information on the questionnaires used with each age group, please see Table 1. Except for bioage08b and bioage12 (and – FiD only – bioage10b), it is usually the mother who completes the questionnaire. In the exceptional case that a mother cannot complete the questionnaire, the father does. The respondents' personal ID numbers (regardless if fathers, mothers or other care takers) are provided in the variable PERSNRESP in the *bioage1* data set. Note that while the parents are the actual respondents (except for bioage12, covering the "Pupils" questionnaire), the data are organized under the child's unchanging personal ID number (PERSNR).

Bioage01: "Mother and Child" Questionnaire, Children Aged 0-1 years

The questionnaire is given to all women who gave birth to a child in the current or previous survey year, and to all women whose non-biological child was born in the same period. The questionnaire contains information on pregnancy, childbirth, childcare, and child health. In the exceptional case that a mother is unable to complete the questionnaire, the father responds.

Bioage02: "Your child between the ages of one and two", Children Aged 1-2 years (FiD only)

The questionnaire is given to all mothers whose child turns two in the current survey year. In the exceptional case that a mother cannot complete the questionnaire, the father responds.

Bioage03: "Your child between the ages of two and three", Children Aged 2-3 years

The questionnaire is given to all mothers whose child turns three in the current survey year. In the exceptional case that a mother cannot complete the questionnaire, the father responds.

Bioage06: "Your child between the ages of five and six", Children Aged 5-6 years

The questionnaire is given to all mothers whose child turns six in the current survey year. In the exceptional case that a mother cannot complete the questionnaire, the father responds.

Bioage08a and Bioage08b: "Parent" Questionnaire, children aged 7-8 years

The questionnaire is given to *both* mothers and fathers of children turning eight in the current survey year. Data of parent 1, which is usually the mother, can be found in *bioage08a*. Data of parent 2, which is usually the father, can be found in *bioage08b*.

Bioage10: "Your child between the ages of nine and ten", Children Aged 9-10 years (only FiD: Bioage10b)

The questionnaire is given to all mothers (FiD: and fathers) whose child turns ten in the current survey year. In the exceptional case that a mother cannot complete the questionnaire, the father responds. Data of parent 1, which is usually the mother, can be found in *bioage10a*. Data of parent 2 (FiD only), which is usually the father, can be found in *bioage10b*.

Bioage12: "Pupils between the ages of eleven and twelve", Children Aged 11-12 years

The questionnaire is given to all children themselves who turn twelve in the current survey year.

Number of Children and Twins in the *Bioage* Data Sets

The data set has grown over the years and now contains data on 11,868 children. At the moment (2015), there are 73 children for whom information has been provided through all of the "Mother & Child", "Parent", and "Pupils" questionnaires (*bioage01, bioage03, bioage06, bioage08a/b, bioage10, and bioage12*). Data are available for 201 children from six questionnaires, 432 children from five questionnaires, 736 children from four questionnaires, for 2,819 children from three questionnaires, and for 3,391 children from two questionnaires. For 4,216 children, data are available from one questionnaire. An overview of the number of children in each data set is given in Table 3.

Bioage	Survey Year									Tatal			
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
\$01	318	247	246	234	205	185	196	1503	353	378	349	444	4658
\$02 (FiD)								787	647	568	187		2189
\$03			257	222	237	246	186	1061	914	745	701	454	5023
\$06						237	210	687	696	612	858	825	4125
\$08a								646	703	715	647	629	3340
\$08b								409	490	500	439	399	2237
\$10								403	510	699	686	656	2954
\$10b (FiD)								242	310	291	301		1144
§12												606	606
Total	318	247	503	456	442	668	592	5738	4623	4508	4168	4013	26276

Table 2:Number of respondents to the "Mother & Child", "Parent", and "Pupils"
questionnaires

Table 4 gives an overview of the number of children per family in the specific age range. Note that there might be more children in the household than indicated here: these children are not in the age range of the "Mother & Child", "Parent", and "Pupils" questionnaires and therefore not covered by the *bioagel* data set.

Ricego File	Number of Children in the Family							
Bioage File	1 Child	2 Children	3 Children	4 Children	5 Children	6 Children		
Bioage01	2774	761	96	13	2	2		
Bioage02 (FiD only)	1671	232	18					
Bioage03	3251	742	75	13	1	1		
Bioage06	2724	631	41	4				
Bioage08a	2382	435	28	1				
Bioage08b	1606	285	19	1				
Bioage10	2162	357	26					
Bioage10b (FiD only)	785	169	7					
Bioage12	570	18						

 Table 3:
 Number of children in the family in the specific age range

The data also includes twins. *Bioage01* contains 96 pairs, *bioage02* 57 pairs, *bioage03* 102 pairs, *bioage06* 64 pairs, *bioage08a* 52 pairs, *bioage08b* 29 pairs, *bioage10* 58 pairs, *bioage10b* 24 pairs, and *bioage10* 10 pairs of twins.

10.3 Topics and Variables

The bioage data contain information regarding

- Pregnancy and childbirth
- Child health
- Childcare situation
- Changes in living circumstances since birth of child
- Child's abilities
- Parenting experiences
- Expectations about the child's success in school
- Educational goals and aspirations of the parents
- Educational behavior of the parents
- Self-conception of the role of parents

The rules used to generate the variables from the questionnaires are consistent over the various *bioage* questionnaires. In the new integrated *bioage long* data set, the data is presented in "long" format, i.e. this dataset contains information from *bioage01*, *bioage03*, *bioage06*, *bioage08a* and *bioage08b*, *bioage10* as well as *bioage12*. In addition, all variables from the FiD-Study are included as well: if there was a corresponding SOEP Variable, the data was combined into the SOEP variable; if there was no corresponding SOEP Variable or if the data was coded differently, the information is provided in separate variables with the suffix *_fid*.

A few variables are generated by combining the information from two or more variables. The present documentation provides detailed information on variables generated using information from other files. An overview of the specific variables and the rules by which they were generated is given in section 10.4 "Generated Variables".

10.4 Generated Variables

This section provides additional information on variables that have been generated from combinations of variables from other datasets than the parent questionnaires.

AGE

Variable label	"Child's age in months"					
Variable format	2-digit integer					
Comment:	This variable provides the child's age in months as a combination of					
	month of birth and interview month. As the exact day of birth remains					
	unknown, information is only an approximation and may vary by one					
	month.					
	Note that the information concerning year and month of birth from the					
	"Mother & Child" and "Parent" questionnaires proved to be partially					
	inconsistent. Therefore, as of the beginning of 2012 the child's age in					
	months is computed using birth information from <i>ppfad</i> . For further					
	information, refer to the documentation on <i>ppfad</i> .					
PREGY						
Variable label	"Mother: pregnant at interview in survey year X"					
Variable format	4-digit integer					
Bioage File	01					
<i>Bioage</i> File Comment	01 This variable is based on information from the previous year's					
5						
5	This variable is based on information from the previous year's					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy status at the time of the interview. If pregnancy was reported (or was					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy status at the time of the interview. If pregnancy was reported (or was unknown) and a child was born, the year in which the interview took					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy status at the time of the interview. If pregnancy was reported (or was unknown) and a child was born, the year in which the interview took place is contained in BCPREGY. Hence this information is available					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy status at the time of the interview. If pregnancy was reported (or was unknown) and a child was born, the year in which the interview took place is contained in BCPREGY. Hence this information is available only for those women in the sample for at least two years with a					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy status at the time of the interview. If pregnancy was reported (or was unknown) and a child was born, the year in which the interview took place is contained in BCPREGY. Hence this information is available only for those women in the sample for at least two years with a completed individual interview in the first year and a completed					
5	This variable is based on information from the previous year's individual questionnaire provided by the mother on her pregnancy status at the time of the interview. If pregnancy was reported (or was unknown) and a child was born, the year in which the interview took place is contained in BCPREGY. Hence this information is available only for those women in the sample for at least two years with a completed individual interview in the first year and a completed "Mother & Child" questionnaire in the second year. Please note that					

PREGMO

Variable label

"Mother:	pregnancy	month at	t interview"
----------	-----------	----------	--------------

Variable format 2-digit integer

01

01

Bioage File

Comment This variable is based on the exact month of birth (BCPREGMO), the duration of childbearing in weeks (BCSSW) and the interview month of the previous year's personal interview. Hence this information is available only for those women in the sample for at least two years. As the exact day of birth is unknown, this variable remains a close approximation.

PREBEG

Variable label "Spell Begin Pregnancy (Month, 01.83=1)"

Variable format 3-digit integer

Bioage File

Comment The variable BCPREBEG contains information on the beginning of pregnancy (i.e., the month of conception). Information is given in the regular SOEP spell format: values start with 1 for January 1983 (e.g., the earliest spell in *bioage01*, survey year 2010, is 304, which equals April 2008).

The variable is based on the exact month of birth (BCPREGMO) and the duration of pregnancy in weeks (BCSSW). Accordingly, information is available only for women who completed the "Mother & Child Questionnaire" and for whom the duration of the pregnancy is known. Note that the month of conception may vary by one month as the exact date of birth remains unknown.

PREEND

Variable label	"Spell End Pregnancy, Birth (Month, 01.83=1)"
Variable format	3-digit integer
Bioage File	01
Comment	The variable BCPREEND contains information on the end of pregnancy (i.e. the month of birth). Information is given in the regular SOEP spell format: values start with 1 for January 1983 (e.g., earliest
	spell in <i>bioage01</i> , survey year 2010, is 304, which equals April 2008).
	This variable is based on the exact month of birth (BCPREGMO) and
	the duration of pregnancy in weeks (BCSSW).
SEX	
Variable label	"Gender of child"
Variable format	1-digit integer
Comment	The sex of the child is not asked for in the "Mother & Child" and
	"Parent" questionnaires. Information on this variable stems from the
	ppfad.
SEXRESP	
Variable label	"Sex of respondent (parent)"
Variable format	1-digit integer
Bioage File	08a, 08b
Comment	This variable tells whether the mother or father answered the respective
	questionnaire. The information for this variable comes from the ppfad
	file.

11 BIOAGE17: The Youth Questionnaire¹

by Marco Giesselmann and Mila Staneva²

A special group of first time respondents are young persons living in a panel household, who reach the surveying age of 17 years. From this specific group of panel entrants, we are able to obtain some more detailed information on youth and socialisation than from other new sample members. At the same time, certain life-course dimensions (as the partnership- or employment biography) have not yet developed in 17 year-olds. With regard to these specifics, the standard biography questionnaire is not appropriate to this group. Thus, we use an independent questionnaire for this special group of first time respondents: the Youth Questionnaire. This instrument is used since the year 2000 and can be understood as an alternative version of the Biography Questionnaire, collecting more comprehensive information on relationships with parents, leisure-time activities, and past achievements in school, as well as on personality characteristics. In addition, there are numerous prospective questions about educational plans and plans for further training, as well as questions about expectations for future career and family.

A number of statements regarding specific circumstances—including the expectations for the future mentioned above—are directly related to the time at which the questionnaire was completed. However, they provide a multifaceted background for long-term analyses since these young people will continue to be interviewed in subsequent years like other SOEP respondents. The Youth Questionnaire also contains retrospective questions, for example, at what age the teenager started his or her first job or first music lessons, what recommendations he or she received regarding choice of secondary school level, and which grades he or she repeated.

11.1 Genesis and Target Population of the Youth Questionnaire

The Youth Questionnaire is aimed at youths who have reached the surveying age of 17 years³ and are therefore being interviewed for the first time. This questionnaire takes the place of the supplementary Biography Questionnaire, since the latter does not apply to the young people's family or career situations. As a rule, information on social origin can be obtained from the parents' Individual Questionnaire, in case the youth lives together with the respective parent. If the teenager does not live with either parent, the Youth Questionnaire collects information on the missing parent(s). Young people who immigrated to Germany are also given the standard questions on immigration from the supplementary Biography Questionnaire. This

¹ In earlier SOEP-data releases BIOAGE17 was called BIOYOUTH.

² Replaces earlier versions by Henning Lohmann and Sven Witzke Jürgen Schupp and Michaela Frühling, Thorsten Schneider and Bettina Isengard.

³ More precisely, this refers to youths who live in an already existing panel household and are or will turn 17 years old in the year of the survey. They are therefore 16 or 17 years old at the time of the interview.

guarantees that all important information collected in the Biography Questionnaire is also available on these young people.

A preliminary version of the Youth Questionnaire was tested in 2000 in samples A-E on individuals born in 1983. An expanded and revised questionnaire entered the field one year later, in 2001, for all samples (A-F). In samples A-E, young people born in 1984 were surveyed, and in sample F, those born in the years 1982 to 1984. With the expansion of the number of birth cohorts, entries for the birth year 1983 are also collected for sample F (data previously existed only for samples A-E), which also creates a clear increase in the number of entries. In the following years, also the youths from additional samples have been interviewed. In 2014, Data from the SOEP-related FID-study from the years 2010 to 2014 has been integrated in the SOEP (Sample L). Therefore, the number of cases in BIOAGE 17 has increased with SOEP Version 31 retrospectively for the years 2010 to 2013, compared with previous versions. You might want to use the psample-variable as filter, if you want to exclude these cases and reproduce your old sample. For an overview data from 6,081 analysable observations up to the present.

Suveyyear				Sample					froquoncy
Suvey year	A-E	F	G	н	1	J	К	L	 frequency
2000	17 yrs								232
2001	17 yrs	17-19 yrs							618
2002	17 yrs	17 yrs							352
2003	17 yrs	17 yrs	17 yrs						365
2004	17 yrs	17 yrs	17 yrs						373
2005	17 yrs	17 yrs	17 yrs						368
2006	17 yrs	17 yrs	17 yrs						307
2007	17 yrs	17 yrs	17 yrs	17 yrs					346
2008	17 yrs	17 yrs	17 yrs	17 yrs					261
2009	17 yrs	17 yrs	17 yrs	17 yrs					243
2010	17 yrs	17 yrs	17 yrs	17 yrs	17 yrs			17 yrs	404
2011	17 yrs	17 yrs	17 yrs	17 yrs		17 yrs		17 yrs	531
2012	17 yrs	17 yrs	17 yrs	17 yrs		17 yrs	17 yrs	17 yrs	537
2013	17 yrs	17 yrs	17 yrs	17 yrs		17 yrs	17 yrs	17 yrs	567
2014	17 yrs	17 yrs	17 yrs	17 yrs		17 yrs	17 yrs	17 yrs	577

Table 1: Target Population for the Youth Questionnaire by year, sample and age

Status: up to wave BE (2014)

In 2006, a new questionnaire on cognitive potential was introduced. Like the Youth Questionnaire, this instrument is aimed at youths who have reached the surveying age of 17 years. In order to keep the Interview at an acceptable length, the standard Individual Questionnaire is now left out for respondents of the Youth Questionnaire. The 2006 data on cognitive potentials was provided for secondary analysis in 2009 (dataset COGDJ).

11.2 Contents and Structure of the Data Set BIOAGE17

From a technical perspective, four different types of questions are asked in the Youth Questionnaire:

A) Questions used to complete certain biographical files (BIOIMMIG, BIOPAREN). These questions are identical to questions in the standard Biography Interview. This applies to the topic blocks 'Origin' (questions 60 to 71) and 'Childhood and Parents' House' (questions 72-87). The corresponding variables are *not* included in BIOAGE17, but combined with biographical information from non-youth new entrants in the files BIOIMMIG and BIOPAREN.

B) Questions that are similar to items in the standard Biography Interview, but go further into detail. This applies to the topic blocks 'Relationships' (questions 12-14), 'Free time and Sport' (questions 15-25) and 'Education and Career plans' (questions 26-55). These variables are stored in BIOAGE17. Corresponding Variables obtained from other new sample members (with a standard Biography Interview) are included in the dataset BIOSOC. Depending on the complexity and scope of the analysis, the user might want to combine corresponding data from BIOAGE17 and BIOSOC in order to access all panel members.

C) Questions that specifically relate to young persons and therefore have no equivalent in the standard Biography Interview. This applies to the topic blocks 'Residence' (questions 1-3), 'Jobs and Money' (questions 4-11), 'Future' (question 59) and 'Attitudes and Opinions' (questions 86-87). These Variables are stored in BIOAGE17 and have no equivalent for other panel entrants in BIOSOC.

D) Since 2006, selected time-variant questions from the unanswered regular individual questionnaire (which is not handed out to first time panel respondents from existing panel households, see 13.1) are added to the Youth Questionnaire. This refers to the questions 56 to 58, 91, 92 and the topic block 'personality' (questions 93 to 101). This data is *not* included in BIOAGE17⁴, but stored in an additional dataset \$PAGE17.

⁴ The first ten items in question 92 are still stored in BIOAGE17, for details see 13.3.

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The design of the dataset BIOAGE17 is patterned after the 2001 Youth Questionnaire, which is the standard version for subsequent years. As in the biographical data survey, every youth answers the Youth Questionnaire only once. The data is therefore presented in column form, just as it would be in a cross-sectional record. The variable ERHEBJ makes it possible to quickly identify the year of the survey. The entries to the questions that were only asked in 2000 and not in 2001 are not included in BIOAGE17. The complete dataset from 2000 is provided free of charge upon request. However, all entries from 2000 that are also included in 2001 are contained in BIOAGE17⁵! With the integration of questions from the Individual Questionnaire in 2006, some changes have occurred in the Youth Questionnaire, especially in the numbering of the questions.

Table 2 (at the end of this chapter) lists all of the variables for the dataset BIOAGE17. The first column contains the name of each variable, the second a brief specification of its content, and the third the number of the question as it appears in the Youth Questionnaire distributed in 2000, wave Q. The fourth column lists the corresponding questions in the Youth Questionnaires 2001 to 2005. In the last column, the question number from 2006 to 2013 youth questionnaires is noted. The variables containing the identification of the person surveyed and the interview situation have no corresponding number because they do not originate from the regular section of the Youth Questionnaire.

11.3 Special Features of Some Questions and Variables

The question regarding the support received by these young people from their parents (question 14) is based on the Supportive Parenting Scale of Simons et al. $(1992)^6$, which was transformed for Germany by Schwarz and Walper $(1997)^7$. The instrument used to compile career orientation (question 54) was taken from Kracke (1996)⁸.

Before 2006, problems arose with the question concerning school attendance (question 25 from 2001 to 2005) because of discrepancies between the information from the Youth Questionnaire and the information on the variable "type of general school attended" from the Individual Questionnaire. Since 2006, 17-year-olds no longer receive the Individual Questionnaire, so the question about school type has been integrated into the question on

⁵ In the event that a question was asked in 2001 but not in 2000, the variable will have the value -3 for the persons who were surveyed in 2000.

⁶ Simons, R.L., F.O. Lorenz, R.D. Conger and C.-I. Wu (1992): Support from spouse as mediator and moderator of the disruptive influence of economic strain on parenting. in: Child Development 63: 1282-1301.

⁷ Schwarz, B. and S. Walper (1997): Erziehung aus Sicht von Eltern und Kindern. Erste Erfahrungen mit den Instrumenten der 1. Erhebung. Berichte aus der Arbeitsgruppe "Familienentwicklung nach der Trennung" #19/97. Ludwig-Maximilians-Universität München.

⁸ Kracke, B. (1996): Fragebogen zur Berufsorientierung bei Realschülern. University of Mannheim, unpublished manuscript.

school attendance. For the previous years, the variable was generated using information from the Individual Questionnaire and questions 25 and 45^9 from the Youth Questionnaire.

If the question on school attendance in the Youth Questionnaire is answered with 'yes' when at the same time information from the regular Individual Questionnaire indicates that the person does not attend the general school system, or vice versa, a recoding is undertaken. In this case the variable BYSCHBES is changed to the value -3 (-3: Entry deleted after intensive examination). Another problem arises if a person states in the Youth Questionnaire that she attends school but does not specify school type in the Individual Questionnaire. In this case the variable BYSCHBES is given the value -1 (-1: no answer).

In question 51, young people are asked whether they know what career they would like to start. If they give a positive answer ('yes, with some certainty', 'yes, with a lot of certainty'), then they are asked to specify the occupation in plain text. This plain-text entry is coded according to the classification of occupations of the Federal Statistical Office, Germany, (Statistisches Bundesamt), version 1992, and according to the ISCO 1988. In addition, the values for Ganzeboom's International Socio-Economic Index of Occupational Status (ISEI), for Treiman's Standard International Occupational Prestige Scale (SIOPS) for Erikson's and Goldthorpe's Class Category (EGP)¹⁰ as well as Wegener's Magnitude Prestige Scale (MPS)¹¹ are also given.

Since 2005 some respondents have a value of -3 in variables BYMUSART, BYMUSMW and BYSPRTMW. This means that they gave more than one answer to the question although only one answer was possible. Because of this, it was not possible to assign a single valid answer.

By extending the questions about personality, we meanwhile ask the questions regarding attitudes about life and the future on a seven-point scale instead of the four-point scale we started with in the earlier version of this battery. From 2006, the variables BYESVERL to BYESENGA are stored with the values 1 (no acceptance) to 7 (total acceptance) and with the values 11 (total acceptance) to 14 (no acceptance) for respondents of previous years. Thus, the normative decision on how to integrate these two scales is up to the user.

⁹ For 2000 questions 24 and 45.

¹⁰ For ISCO 88, SIOPS, ISEI and EGP see Ganzeboom, H.B.G. and D.J. Treiman (1996): Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations. in: Social Science Research 25, 201-239.

¹¹ Frietsch, R. and H. Wirth (2001): Die Übertragung der Magnitude-Prestigeskala von Wegener auf die Klassifizierung der Berufe. in: ZUMA-Nachrichten, 48, 139-163.

Variable Name	Content of the Variable	Number of Question in Youth Questionnaire 2000 ¹²	Number of Question in Youth Questionnaire 2001-2005	Number of Question in Youth Questionnaire 2006 - 2014
	Entries for surveyed person			
HHNR	Original household identifier (invariant)			
HHNRAKT	Actual household identifier			
PERSNR	Personal identifier			
BEFRPER	Respondent identifier			
ERHEBJ	Survey year			
BYGEBJAH	Year of birth			
BYMNR	identifier of mother (taken form BIOPAREN			
	social, not necessarily biological relationship)			
BYVNR	identifier of father (taken from BIOPAREN			
	social, not necessarily biological relationship)			
	Residence			
BYWOELT	Residing in parents' household (HH)	01	01	01
BYWOZIM	Own room	02	02	02
BYWOWEI	Additional apartment outside of parents' HH	04	03	03
	Jobs and Money			
BYVDEIG	Own income	09	04	04
BYVDART	Type of income	10	05	04
BYJBFRUE	Worked before (on holiday or while in school)	13	06	05
BYJBALT	Age by first job (on holiday or while in school)	13	07	00
BYJBGRUN	Reason for working	-	08	08
BYTGELD	Allowance	15	09	09
BYTGELDW	Amount of allowance per week	16	10	10
BYTGELDW	Amount of allowance per month	16	10	10
BYSPAR	Saving money	17	11	11
BYSPARM	Amount saved every month	17	11	11
BYSPARUN	Sporadic saving	17	11	11
	Relationships			
	Importance of various persons:		12	40
BYWIVA	Father	-	12	12
BYWIMU	Mother Brother Cistor	-	12	12
BYWIBS	Brother, Sister	-	12	12
BYWIVW	Other related persons	-	12	12
BYWIFFR BYWIBFR	Serious boy/girlfriend Best friend	-	12 12	12
BYWILEHR	Teacher	-		12
BYWILEHR		-	12 12	12 12
BYWICLQ	Clique Other person	-	12	12
	Other person Frequency of fights with:	-	τζ	τZ
BYSTRVA	Father	_	13	13
BYSTRMU	Mother	-	13	13
51511100	Brother, Sister		13	13

Table 2: Description of the data set BIOAGE17

¹ If no corresponding question/variable exists, it is assigned a minus sign; numbers/names in parentheses mean that there is no identical question/variable but a corresponding one.

Variable Name	Content of the Variable	Number of Question in Youth Questionnaire 2000 ¹²	Number of Question in Youth Questionnaire 2001-2005	Number of Question in Youth Questionnaire 2006 - 2014
BYSTRFFR	Serious boy/girlfriend	-	13	13
BYSTRBFR	Best friend	_	13	13
BYBZ01MU	Talk with mother about personal experiences	-	14	14
BYBZ01VA	Talk with father about personal experiences	-	14	14
BYBZ02MU	Mother addresses problems	-	14	14
BYBZ02VA	Father addresses problems	-	14	14
BYBZ03MU	Mother asks opinion before a decision is made	-	14	14
BYBZ03VA	Father asks opinion before a decision is made	-	14	14
BYBZ04MU	Mother shows approval	-	14	14
BYBZ04VA	Father shows approval	-	14	14
BYBZ05MU	Solve problems together with mother	-	14	14
BYBZ05VA	Solve problems together with father	-	14	14
BYBZ06MU	Mother shows trust	-	14	14
BYBZ06VA	Father shows trust	-	14	14
BYBZ07MU	Mother asks opinion on family issues	-	14	14
BYBZ07VA	Father asks opinion on family issues	-	14	14
BYBZ08MU	Mother justifies decision	-	14	14
BYBZ08VA	Father justifies decision	-	14	14
BYBZ09MU	Mother shows love	-	14	14
BYBZ09VA	Father shows love	-	14	14
	Free time and Sport			
	Frequency of free time activities:		45	4 -
BYFZFERN	TV, Video	-	15	15
BYFZPC	Computer games	-	15	15
BYFZMUSH	Listen to music	-	15	15
BYFZMUSS	Play music	-	15	15
BYFZSPRT	Do sports	-	15	15
BYFZTANZ	Dance, Theatre	-	15	15
BYFZTECH	Technical work, Programming	-	15	15
BYFZLESE	Read	-	15	15
BYFZEHRE	Volunteer activities	-	15	15
BYFZABH	Do nothing, hang around, day dream	-	15	15
BYFZMFFR	Spend time with boy/girlfriend	-	15	15
BYFZMBFR	Spend time with best friend	-	15	15
BYFZMCLQ	Spend time with clique	-	15	15
BYFZINT	Internet/chatting	-	-	15
BYFZJUGZ	visiting youth center	-	-	15
BYFZRELI	go to church/religious activities	-	-	15
BYMUSSP	Actively make music	-	16	16
BYMUSART	Style of music made	-	17	17
BYMUSMW	Play music with whom	-	17a	18
BYMUSALT	Age starting playing music	-	18	19
BYMUSUNT	Paid music lessons	-	19	20
BYSPRTTR	Participate in sports	20	20	21
BYSPRTAR	Favourite sport	21	21	22
BYSPRTAL	Age started favourite sport	23	22	23
BYSPRTMW	Where and with whom favourite sport	23	23	24
BYSPRTWE	Participation in competitions	23	24	

Variable Name	Content of the Variable	Number of Question in Youth Questionnaire 2000 ¹	Number of Question in Youth Questionnaire 2001-2005	Number of Question in Youth Questionnaire 2006 – 2014
	Education and Career Plans			
BYSCHBES ²	School attendance	24 / PF: 09	25 / PF ³	26
BYSKLASS	Current school year (since 2014)			26a
BYSCHEND	Last year of school	25	26a	27
BYSCHABS	Type of school certificate	26	26b	28
BYSCHZUK	Strive for further school certificate	27	27	29
BYSCHZAR	Type of further school certificate	28	28	30
BYFMD1 ⁴	1. foreign language	32	29	31
BYFMD2	2. foreign language	32	29	31
BYSCHAUS	School attendance in foreign country	29	30	32
BYAUSAB	Foreign country: starting year (since 2014)			32a
BYAUSAE	Foreign country: end year (since 2014)			32b
BYSCHPRI	Attendance in a private school	-	31	33
	Activities in school:			
BYENKSPR	Class representative	34	32	34
BYENSSPR	School representative	34	32	34
BYENSZTG	School newspaper	34	32	34
BYENTHEA	Theatre, Dance group	34	32	34
BYENCHOR	Choir, Music	34	32	34
BYENSPRT	Sport group	34	32	34
BYENSONS	Other groups	34	32	34
BYENNEIN	No activities	34	32	34
BYZFINSG	Satisfaction with effort at school (overall)	31	33	35
BYZFDEUT	Satisfaction with effort in German	31	33	35
BYZFMATH	Satisfaction with effort in math	31	33	35
BYZFFMD1	Satisfaction with effort in 1. foreign language	31	33	35
BYEMPFEH	Recommendation after elementary school	-	34	36
BYNTDEUT	Last grade ⁵ in German	33	35	37
BYNTMATH	Last grade in math	33	35	37
BYNTFMD1	Last grade in 1. foreign language	33	35	37
BYPTDEUT	Total points ⁶ in German	33	35	37
BYPTMATH	Total points in math	33	35	37
BYPTFMD1	Total points in 1. foreign language	33	35	37

¹ If no corresponding question/variable exists, it is assigned a minus sign; numbers/names in parentheses mean that there is no identical question/variable but a corresponding one.

² As mentioned in 13.3, for the years 2000 to 2005 the variable BYSCHBES is generated in consideration of information stemming from the personal questionnaire.

³ The relevant question from the personal questionnaire differs from year to year: for 2001 question 11, for 2002 question 14, for 2003 question 33, for 2004 question 08, and for 2005 question 09.

⁴ Additional category since 2006: value 7 "Spanish".

⁵ Students normally receive grades ranging from 1 to 6, whereby 1 is the best and 6 the worst. This system of assigning grades is used up to the 11th or 12th grade (level II of upper secondary or comprehensive school) depending on the federal state. After that, a new grading system is used. To make the data set more user-friendly, the information given for school grades and the information on points transformed into grades is stored in this variable. Note: No corrections have been made when a person has reported both grades and point scores and when the two types of information do not correctly correspond.

⁶ From the 11th or 12th grade on, pupils are awarded points in upper secondary or comprehensive school ranging from 0 to 15, whereby 15 points are the best, 0 points the worst. The link between points and grades is as follows: 0 points: 6; grade of 1 to 3 points: grade of 5; 4 to 6 points: grade of 4; 7 to 9 points: grade of 3; 10 to 12 points: grade of 2; 13 to 15 points: grade of 1.

Variable Name	Content of the Variable	Number of Question in Youth Questionnaire 2000 ¹	Number of Question in Youth Questionnaire 2001-2005	Number of Question in Youth Questionnaire 2006 – 2014
BYGSDEUT	Level of German at comprehensive school ⁷	33	35	37
BYGSMATH	Level of math at comprehensive school	33	35	37
BYLKDEUT	Complementary / main subject ⁸ in German	33	35	37
BYLKMATH	Complementary / main subject in math	33	35	37
BYLKFMD1	Complementary / main subject in	33	35	37
	1. foreign language			
BYKLWDJA	Class repeated	35	36	38
BYKLWD1	Class level 1. repeated	36	37	39
BYKLWD2	Class level 2. repeated	36	37	39
BYNACHHI	Paid tutor lessons	37	38	40
BYELKUEM	Parents care about efforts at school	39	39	41
BYELHAUS	Parents help with homework	40	40	42
BYELDIFF	Problems with parents because of effort at	41	41	43
BILLDIII	school	41	71	
BYELABEN	Parents attend parents' evening	42	42	44
BYELSPRE	Parents go to parents' day	42	42	44
BYELLEHR	Parents go to see a teacher	42	42	44
BYELVERT	Active as parent representative	42	42	44
BYELNIDA	Parents do not participate in any of these activities	42	42	44
BYKLAUSL	Number of foreign classmates	(43)	43	45
BYBAABGE	Vocational education, Internship, training	44	44	46
BYBABGJ	Vocational introductory year	45	45	47
	("Berufsgrundschul- /			
	Berufsvorbereitungsjahr")			
BYBABEGL	Vocational integration training ("Berufl.	45	45	47
	Eingliederungslehrgaenge")			
BYBALEH	Vocational education, apprenticeship	45	45	47
	("Berufsausbildung, Lehre")			
BYBABFS	Full-time vocational school/ School for public health ("Berufsfachschule / Schule des Gesundheitswesen")	45	45	47
		45	45	47
BYBAPRAK	Internship ("Praktikum, Voluntariat")	45	43 46	47 48
BYZAJA	Vocational / university degree is aspired Type of aspired vocational / university degree:	40	40	48
BYZALEH	Apprenticeship ("Lehre")	47	47	49
BYZABFS	Full-time vocational school/ School for public	47	47	49
	health ("Berufsfachsule / Schule des Gesundheitswesen")			-
BYZAFSC	Technical school, school for master of a trade ("Fachschule, Meister-, Technikerschule")	47	47	49
BYZABEA	Training for civil servants (officer) ("Beamtenausbildung")	47	47	49
BYZABAK	Approved vocational academy ("anerkannte	47	47	49

⁷ The subjects German, math and the first foreign language are split up into different levels during the secondary school level I in comprehensive schools. Level A is the highest. The number of levels differs between the federal states.

states. ⁸ From the 11th or 12th grade on, pupils can choose their main subjects. At this stage, German, math and foreign languages can be downgraded from major to minor subjects.

Variable Name	Content of the Variable	Number of Question in Youth Questionnaire 2000 ¹	Number of Question in Youth Questionnaire 2001-2005	Number of Question in Youth Questionnaire 2006 – 2014
	Berufsakademie")			
BYZAFH	Advanced technical college ("Fachhochschule")	47	47	49
BYZAUNI	University	47	47	49
BYSLBALT	Desired age for financial independence	48	48	50
BYBWUNJA	Occupation is aspired Occupation categories, encoded:	49	49	51
BYKLAS	Classification of career according to the Federal Statistical Office, Germany, (Statistisches Bundesamt), version 1992	50	50	52
BYISCO88	International Standard Classification of Occupation 1988 (ISCO88)	50	50	52
BYEGP	Erikson and Goldthorpe's Class Category (EGP)	50	50	52
BYISEI	International Socio-Economic Index of Occupational Status after Ganzeboom (ISEI)	50	50	52
BYSIOPS	Treiman's Standard International Occupational Prestige Scale (SIOPS)	50	50	52
BYMPS	Magnitude Prestige Scale after Wegener (MPS)	50	50	52
BYZBINF	Information level of planned career	-	51	53
BYZBELT	Influence of the parents on career choice	-	52	54
BYZBLAS	No specific career in mind	-	52	54
BYZBBES	Intensive thoughts about various careers	-	52	54
BYZBRAU	Still looking for a career Important aspects for the career choice:	-	52	54
BYWBSICH	Secure job	51	53	55
BYWBEINK	High income	51	53	55
BYWBAUF	Promotion opportunities	51	53	55
BYWBANE	Established profession	51	53	55
BYWBFREI	Enough free time	51	53	55
BYWBINT	Interesting activities	51	53	55
BYWBSELB	Working independently	51	53	55
BYWBKONT	Contact with persons	51	53	55
BYWBGSL	Relevant to society	51	53	55
BYWBGSND	Healthy conditions at work	51	53	55
BYWBFAM	Flexibility for family	51	53	55
BYWBHELF	Help others	51	53	55
	Future Probability of future career related and private even		54	50
BYWAAUSP	To be accepted for a desired apprenticeship / place at university	52	54	59
BYWAERFA	To complete training/ university successfully	52	54	59
BYWAARBP	Job in desired career	52	54	59
BYWABERF	Job-related success	52	54	59
BYWAARBL	Longer unemployment	52	54	59
BYWAZURU	From family related reasons held back in career	52	54	59
BYWASELB	Self-employed	52	54	59

Variable Name	Content of the Variable	Number of Question in Youth Questionnaire 2000 ¹	Number of Question in Youth Questionnaire 2001-2005	Number of Question in Youth Questionnaire 2006 – 2014
BYWAAUSL	Work in foreign country	52	54	59
BYWAHEIR	To marry	52	54	59
BYWAPART	Live together with partner (not married)	52	54	59
BYWAKID1	Have one child	52	54	59
BYWAKIDM	Have two or more children	52	54	59
	Attitudes and Opinions			
BYGLPART	Happiness: live with/without partner	82	79	86 ⁹
BYGLKIND	Happiness: with/without children Success in FRG from	-	80	87 ¹⁰
BYEFFLEI	Studiousness	86	81	88 ¹¹
BYEFAUSN	Exploitation of others	86	81	88
BYEFINT	Intelligence	86	81	88
BYEFFAM	Family's origin	86	81	88
BYEFFACH	Technical know-how	86	81	88
BYEFGELD	Money	86	81	88
BYEFSABS	School education	86	81	88
BYEFHART	Being inconsiderate and hard	86	81	88
BYEFBEZ	Networking	86	81	88
BYEFPOLI	Political activities	86	81	88
BYEFMANN	Sex/ 'being a man'	86	81	88
BYEFINI	Being dynamic and taking initiative	86	81	88
BYESVERL	What happens in life, depends on me	-	(82)	90 ¹²
BYESERRE	Did not reach, what I deserve	-	(82)	90
BYESGLUE	What you achieve, is a matter of luck	-	(82)	90
BYESAND	Others decide about my life	-	(82)	90
BYESHART	You have to work hard for success	-	(82)	90
BYESZWEI	By difficulties, doubt about own abilities	-	(82)	90
BYESSOZU	Chances are determined by social circumstances	-	(82)	90
BYESFAEH	Abilities are more important than efforts	-	(82)	90
BYESKNTR	Little control over events in my life	-	(82)	90
BYESENGA	Change of social circumstances through social/political activities	-	(82)	90
BYINTA BYDAUER1 BYDAUER2 BYANW BYTAGIN	Specification of Interview Situation Type of interview Duration of personal interview Duration of interview filled out independently Presence of other persons Day of the interview			
BYMONIN INTID	Month of the interview Identifier of the interviewer			

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 ⁹ Question 88 in 2012
 ¹⁰ Question 89 in 2012
 ¹¹ Question 90 in 2012
 ¹² Question 92 in 2012

12 BIOSOC: Retrospective Data on Youth and Socialization

by Marco Giesselmann and Mila Staneva¹

The standard supplementary Biography Questionnaire was expanded in 2000, and again in 2001 to include some specific questions on youth and early adulthood. Some of these questions are derived from the independent Youth Questionnaire (for detailed information on this questionnaire, see chapter 13). The expanded questionnaire asks respondents of all ages to describe aspects of their life at the age of 15, including their relationship with parents, grades in school, the federal state where they last attained educational qualifications, detailed information or vocational qualifications, as well as intentions to complete further education or vocational training (the latter questions were relevant mainly to younger respondents). Questions concerning military and alternative services are also included in this data set.

As these questions are a part of the standard Biography Questionnaire, they are only asked once. Some of these questions can, however, be followed up by the regular data collected in the Individual Questionnaire. For example, if someone was too young to have completed his military service when the Biography Questionnaire was conducted, the user can look at the data set ARTKALEN in later years, where labour force participation is recorded on a monthly basis. Here one can find out if somebody was doing military service at the time or not.

survey year	frequency
2000	246
2001	8,.819
2002	552
2003	2,328
2004	450
2005	299
2006	223
2007	2,232
2008	336
2009	196
2010	2,038
2011	14,797
2012	2,855
2013	5,370
2014	552
Total	41,293

sample	frequency
A: Germans (west)	904
B: Foreigners (west)	258
C: Germans (east)	622
D: Immigrants 1984- 1993	128
E: Supplement 1998	256
F: Innovation 2000	9.817
G: High-Income 2002	2.256
H: Supplement 2006	2.193
I: Incentivation 2009	1,870
J: Supplement 2011	5,367
K: Supplement 2012	2.550
L: Family Samples 11/12	9.833
M: Migrants 2013	5.239
Status: up to wave BE (2014)	

¹ Replaces earlier versions by Henning Lohmann and Sven Witzke Jürgen Schupp and Michael Frühling Bettina Isengard and Thorsten Schneider.

The data set BIOSOC contains information on 30,960 persons, of whom 8,819 stem from the year 2001. The reason for this is that the Biography Questionnaire was directed to sample F, as this was its second survey year. Consequently, the majority of the persons in this data set belong to sample F (32%) or the samples which were included in more recent years (sample G, H, I, J, K and M).

In 2014, Data from the SOEP-related FID-study from the years 2010 to 2014 has been integrated in the SOEP (Sample L). Therefore, the number of cases in BIOAGE 17 has increased with SOEP Version 31 retrospectively for the years 2011 to 2013, compared with previous versions. You might want to use the psample-variable as filter, if you want to exclude these cases and reproduce your old sample.

12.1 Structure of the Data Set BIOSOC

Respondents are given the Biography Questionnaire only once in a lifetime. Some of the information stored in the new data set BIOSOC is invariant (such as the relationship to parents at the age of 15) or is not surveyed to such an extent in the regular questionnaire (such as last school grades). Consequently there is only one record for each person and updates are not intended for this data set. The variable ERHEBJ makes it possible to quickly identify the year of the survey. Using the variable BSGEBJAH, which contains the year of birth, the user can determine the respondent's age. If the respondent is of a certain age, one can assume that some of the variables are constant. This applies to variables such as last school grades or military service.

In Table 3 (at the end of the chapter) all variables of the data set BIOSOC are listed. The first column contains the name of the variable, the second a brief specification of its content. The third column contains the number of the question as it appears in the Biography Questionnaire of wave Q (2000). Here, a minus sign means that the variable is not available in a given year and a question number in parenthesis indicates limited comparability. The fourth column contains the number of question in waves R to BD (2001-2013). As one can see, all listed questions were asked in the year 2001. In the last column the corresponding variable in the BIOAGE17 dataset is given, if available.

12.2 Special Features of Some Questions and Variables

The interviewees were asked if they did sports in their youth. If they answered in the affirmative, they were asked to include the sport they participated in most. This information was re-coded to a numeric variable and categorised. Some categories could easily be coded, such as soccer, whereas for others this was not possible. For users interested in specific research questions on sports in youth, the original plain text answers can be provided upon request.

Individuals were asked: "When was the last year you attended school?" (Question 40). If they were still attending school, they had the opportunity to report that they were students. Unfortunately in the years 2001 to 2003, individuals who reported being students or who did not provide any answer to this question skipped over numerous questions due to the questionnaire design. Consequently, for these individuals there is no information on the number of foreign classmates², on the school degree aspired to, or planned vocational qualifications. Their record also lacks information on past vocational qualifications. However, this should prove less problematic since most of the students were enrolled in regular school programs throughout the entire time.

In 2011, the Biography Questionnaire was integrated in the Individual Questionnaire for the samples J and K. For these samples a new variable was introduced – BSDAUER3 – which shows the interview duration with the integrated questionnaire version. All other samples are coded with "-6" on this variable.

In 2012, sample M containing only respondents with migration background was added in SOEP (*SOEP Survey Paper 216*). This sample was surveyed with a modified version of the Biography Questionnaire which focuses on the immigration history and therefore misses some of the standard questions from the original Biography Questionnaire (*SOEP Survey Paper 218*). The last column in Table 3 gives an overview of the variables in BIOSOC available for the migration sample. A minus signs means that the variable is not available for sample M (in the Data, we used the missing code "-5" in such cases). A question number in parenthesis indicates that the question in the Migration Questionnaire is comparable, but not identical to the question in the original Biography Questionnaire.

 $^{^{2}}$ Most persons with no valid information on foreign classmates are not students but individuals who finished school abroad. This is because the question only targets those in German schools.

Table 3:Description of the data set BIOSOC

Variable	Content of the Variable	Number of Question in Biography Questionnaire		raphy	Comparable Variable in	Comparable Question in		
Name	content of the variable	2000	2001- 2010	2011- 2012	2013	2014	BIOAGE17	Migration Questionnaire 2013
HHNR HHNRAKT PERSNR BEFRPER ERHEBJ BSGEBJAH	Entries for Surveyed Person Original household identifier (invariant) Actual household identifier Personal identifier Respondent identifier Survey year Year of birth						HHNR HHNRAKT PERSNR BEFRPER ERHEBJ BYGEBJAH	
BSELKUEM BSNTDEUT BSNTMATH	School Parents took care about efforts at school Last grade in German Last grade in maths	-	29 30 30	30 31 31	32 33 33	36 37 37	BYELKUEM BYNTDEUT BYNTMATH	-
BSNTFMD1 BSPTDEUT BSPTMATH	Last grade in 1. foreign language Total points ¹ in German (last class) Total points in maths (last class)	-	30 30^{2} 30^{2}	31	33	37	BYNTFMD1 BYPTDEUT BYPTMATH	- - -
BSPTFMD1 BSGSDEUT	Total points in 1. foreign language (last class) Level of German at comprehensive	-	30^2 30^2				BYPTFMD1 BYGSDEUT	-
BSGSMATH	school ¹ (last class) Level of maths at comprehensive school (last class)	-	30 ²				BYGSMATH	-
BSGSFMD1 BSLKDEUT	Level of 1. foreign language at comprehensive school (last class) Complementary / main subject ⁴ in German (last class)	-	30^2 30^2				BYGSFMD1 BYLKDEUT	-
BSLKMATH BSLKFMD1	Complementary / main subject in maths (last class) Complementary / main subject in 1.	-	30^2 30^2				BYLKMATH BYLKFMD1	-

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Variable	Content of the Variable			Questior lestionna		raphy	Comparable Variable in	Comparable Question in	
Name	content of the variable	2000	2001- 2010	2011- 2012	2013	2014	BIOAGE17	Migration Questionnaire 2013	
	Foreign language (last class)								
	Relationships to Parents, Sport and Activities during Youth								
	Frequency of fights when respondent was 15. years old with:								
BSSTRVA	Father	-	31	32	34	38	BYSTRVA	-	
BSSTRMU	Mother	-	31	32	34	38	BYSTRMU	-	
BSSPRTTR	Participated in sports during youth	-	32/33	34	36	40	BYSPRTTR	57	
BSSPRTAR	Favourite sport during youth	-	33/34	35	37	41	BYSPRTAR	-	
BSSPRTWE	Participated in competitions during youth	-	33/35	36	38	42	BYSPRTWE	-	
BSMUSSP	Played music or sang during youth	-	35/32	33	35	39	BYMUSSP	56	
	School Attendance								
BSSCHBES	Still at school	(34)	37	38	40	44	BYSCHBES	69	
BSSCHEND	Year left school	-	37	38	40	44	BYSCHEND	69	
BSSCHWO	Country of last school attendance	(34)	38	39	41	45	-	70	
BSSCHLA	Federal State of last school attendance	-	41	42	44	48	-	73	
BSKLAUSL	Number of foreign classmates	(37)	43	44	46	50	BYKLAUSL	75	
BSSCHZUK	Strive for further school certificate	35	44	45	47	51	BYSCHZUK	76	
BSSCHZAR	Type of further school certificate	36	45	46	48	52	BYSCHZAR	77	
BSBADABG	Attained and Planed Vocational Qualification Vocational / university degree acquired in Germany	38	46	47	49	53	(BYBAABGE)	80	
	<i>Type of vocational / university degree attained in Germany:</i>								
BSBADLEH	Apprenticeship ("Lehre")	39	47	48	50	54	(BYBABFS)	81	

Variable	ariable Content of the Variable			Question Jestionna		raphy	Comparable Variable in	Comparable Question in	
Name	Content of the variable	2000	2001- 2010	2011- 2012	2013	2014	BIOAGE17	Migration Questionnaire 2013	
BSBADBFS	Full-time vocational school / School for public health ("Berufsfachsule / Schule des Gesundheitswesens")		47	48	50	54	(BYBABFS)	81	
BSBADFSC	Technical school, school for master of a trade ("Fachschule, Meister-, Technikerschule")	39	47	48	50	54	-	81	
BSBADBEA	Training for civil servants (officer) ("Beamtenausbildung")	39	47	48	50	54	-	81	
BSBADFHA	Advanced technical college ("Fachhochschule") or approved vocational academy ("anerkannte Berufsakademie")	39	47	48	50	54	-	81	
BSBADUNI	University degree	39	47	48	50	54	-	81	
BSBADPRO	Doctorate ("Promotion")	-		48 ⁵	50	54	-	81	
BSBADSON	Other vocational qualification	39	47	48	50	54	(BYBABGJ, BYBABEGL)	81	
BSBADEND	Year of attaining vocational / university degree in Germany	-	48	48	50	54	-	81	
BSBAAABG	Vocational / university degree acquired abroad	40	49	49	51	55	-	82	
	<i>Type of vocational / university degree</i> <i>attained abroad:</i>								
BSBAAFAN	Short-term training in a company	41	50		52	56	-	(83)	
BSBAAFBA	Apprenticeship in a company	41	50		52	56	-	(83)	
BSBAASCH	Vocational or professional school	41	50		52	56	-	(83)	
BSBAAUNI	University degree	41	50		52	56	-	(83)	
BSBAASON	Other vocational qualification	41	50		52	56	-	(83)	
BSBAAEND	Year of attaining vocational / university degree abroad	-	51		53	57	-	(83)	
BSBAAZEU	Certificate for abroad attained	42	52		54	58	-	(84)	

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Variable	Content of the Variable	Nu	mber of Qu	Questior lestionna		graphy	Comparable Variable in	Comparable Question in	
Name	Content of the variable	2000	2001- 2010	2011- 2012	2013	2014	BIOAGE17	Migration Questionnaire 2013	
	qualification								
BSBAAABA	Applied for recognition					59			
BSBAAARA	Result recognition					59			
BSBAAAGA	Reason no recognition					59			
BSBAAAMB	Month of assessment					59			
BSBAAAJB	Year of assessment					59			
BSBAAZEA	Recognition of aboard attained certificate	42	52		54	59	-	(85 to 89)	
BSZAJA	Vocational / university degree is aspired	43	53		55	60	BYZAJA	95	
	<i>Type of aspired vocational / university degree:</i>								
BSZALEH	Apprenticeship ("Lehre")	44	54		56	60	BYZALEH	96	
BSZABFS	Full-time vocational school/ School for public health ("Berufsfachschule / Schule des Gesundheitswesens")	44	54		56	60	BYZABFS	96	
BSZAFSC	Technical school, school for master of a trade ("Fachschule, Meister-, Technikerschule")	44	54		56	60	BYZAFSC	96	
BSZABEA	Training for civil servants (officer) ("Beamtenausbildung")	44	54		56	60	BYZABEA		
BSZABAK	Approved vocational academy ("anerkannte Berufsakademie")	44	54		56	60	BYZABAK		
BSZAFH	Advanced technical college ("Fachhochschule")	44	54		56	60	BYZAFH		
BSZAUNI	University degree	44	54		56	60	BYZAUNI		
	Military and Voluntary Service								
BSDIGEL	Military or alternative service done (only men)	58	71/74	74	79	78	-	-	
BSDIART	Type of service (only men)	58	71/74	74	79	78	-	-	

Variable	Content of the Variable	Nu	mber of Qເ	Question estionna		raphy	Comparable Variable in	Comparable Question in	
Name	content of the variable	2000	2001- 2010	2011- 2012	2013	2014	BIOAGE17	Migration Questionnaire 2013	
BSDIGRU	Reason for not serving (only men)	58	71/74	74	79	78	-	-	
BSFSJ	Voluntary social service ("Freiwilliges Soziales Jahr")	-	72/73	73	78	77	-	-	
BSBFD	Federal voluntary service ("Bundesfreiwilligendienst")	-		78	78	77	-	-	
BSFWD	Voluntary military service ("Freiwilliger Wehrdienst")	-		78	78	77	-	-	
	Specification of Interview								
	Situation								
BSINTA	Type of interview						BYINTA		
BSDAUER1	Duration of personal interview						BYDAUER1		
BSDAUER2	Duration of interview filled out independently						BYDAUER2		
BSDAUER3	Interview duration with the integrated questionnaire version						-		
BSTAGIN	Day of the interview						BYTAGIN		
BSMONIN	Month of the interview						BYMONIN		
INTID	Identifier of the interviewer						INTID		

¹ To make the data set more user-friendly, the information given on points are transformed into grades and stored in the corresponding variable. The link between points and grades is as follows: 0 points: grade of 6 1 to 3 points: grade of 5 4 to 6 points: grade of 4 7 to 9 points: grade of 3 10 to 12 points: grade of 2 13 to 15 points: grade of 1.

² Only in survey year 2001 (wave R)

³ The subjects German, math and the first foreign language are split up into different levels during the secondary school level I of comprehensive schools. Level A is the highest one. ⁴ From the 11th or 12th grade on students can choose their main subjects. At this stage, they can reduce German, maths and foreign languages from major to minor subjects.

⁵ This item was integrated in the Biography Questionnaire in 2011.

13 BIOPAREN: Biography Information for the Parents of SOEP-Respondents

by Anne Fromm, Sebastian Frischholz and Daniel D. Schnitzlein¹

13.1 Short summary

The aim of the data file BIOPAREN is to make the biography entries on the parents and on the social origin of the respondent available.

13.2 How biography information has been collected in the SOEP

In the third wave (1986) intergenerational aspects of the persons surveyed were included for the first time by means of a special group of questions in the Individual Questionnaire. These dealt with statements made about the education or professional training of the parents, the parents' residency, and their year of birth and death. For Sample B, only the education, residency, year of birth and death of the parents were asked. In 1988 the complete collection of biography questions (history of labor force participation, marriage and family biography, career start, and social origin) was included in the Individual Questionnaire for individuals surveyed for the first time. At the same time, a follow-up survey was given to those participants who had not yet received all or part of this collection of questions. This survey was continued in this form each of the following years until 1991, when the separate Biography Questionnaire was introduced. Since 1994, the biography was collected using the Personal History Questionnaire ('Lebenslauf-Fragebogen'), a slightly modified version of the Biography Questionnaire.

The Biography was included in Sample C in the third survey wave, that is, in 1992. The biographies of the persons in Sample D1 and D2 were collected during the first survey in 1994 and 1995. In 1999 the biography was collected for Sample E. In 2001 the follow-up survey was completed for Sample F and was followed by Sample G (High-Income) in 2003. The retrospective data of the sample H was collected in 2007. In 2009 the new subsample I with valid interview data on about 2.500 adults was introduced in the SOEP. These new respondents did not fill in the biography questionnaire in order to reduce response burden in the first wave. Their data have been integrated in their second wave (2010). Starting with sample J which is introduced in 2011 the Biography Questionnaire has been reintegrated in the Personnel Questionnaire and is answered again in the first year. This is also true for the

¹ This documentation is based on earlier versions of the BIOPAREN documentation and has benefited from previous work by Charlotte Büchne, Stefanie Lenuweit, Katharina Mahne, Matthias Pollmann-Schult, Jürgen Schupp and Verena Tobsch.

migration sample M1 for which the Biography Questionnaire is only a subset of a larger number of questions also covering own and parental migration history.

In addition to the Biography Questionnaire, there has been an independent questionnaire (Youth Questionnaire) in SOEP since 2000 for the group of survey participants who are 16-17 years old and are being interviewed for the first time (see also chapter BIOYOUTH). 2

In SOEPv31 the former independent survey "Familien in Deutschland" (FiD) was integrated in the SOEP distribution (subsample L1-L3). As the latest FiD version (FiDv4.0) also contained a BIOPAREN file which was generated in a similar way to the SOEP version of BIOPAREN, it was possible to fully integrate the information of FiD in SOEP BIOPAREN.³

The biography information in FiD was collected as follows: since the first wave of FID in 2010 the respondents received a separate Biography Questionnaire in addition to the Individual Questionnaire. In 2010 it included only questions about the history of the surveyed persons themselves. In 2011 (the second wave of FID) another part of the Biography Questionnaire was handed out, where intergenerational aspects of the persons surveyed were included by means of a special group of questions. This deals with statements made about the education or professional training of the parents, the parents' residency, and their year of birth and death. In 2012 and 2013 the complete collection of biography questions was included in only one Biography Questionnaire for individuals surveyed for the first time. However, those who had only answered either of the two separate parts handed out in wave one and two were given the other, still unanswered part.

Therefore, there are persons who filled in the two Biography Questionnaire parts separately as well as persons who were given the complete questionnaire. In addition, there are respondents who only answered one of the two parts because they dropped out of the study at some point. This is the reason why there are persons who answer two Biography Questionnaires (but different parts of it) in two different years.

In addition to the Biography Questionnaire, similar to the SOEP, there was an independent questionnaire (Youth Questionnaire) for the group of survey participants who are 17 years old and are being interviewed for the first time.

Table 1 gives an overview on the development of the number of respondents that enter BIOPAREN in each year by subsample.

 $^{^{2}}$ A more precise representation of the development of the instruments used to collect the Personal History, including the social origin, can be found in the introduction to this documentation.

³ A detailed documentation of FiD BIOPAREN is available in the FiD data documentation.

Year of data collection	Ν	Samples														
		А	В	С	D	Е	F	G	Н	Ι	J	K	L1	L2	L3	M1
1984	1,682	1,079	603	-	-	-	-	-	-	-	-	-	-	-	-	
1985	11,087	8,369	2,718	-	-	-	-	-	-	-	-	-	-	-	-	
1986	501	355	146	-	-	-	-	-	-	-	-	-	-	-	-	
1987	464	310	154	-	-	-	-	-	-	-	-	-	-	-	-	
1988	380	245	135	-	-	-	-	-	-	-	-	-	-	-	-	
1989	384	246	138	-	-	-	-	-	-	-	-	-	-	-	-	
1990	4,811	221	139	4,451	-	-	-	-	-	-	-	-	-	-	-	
1991	506	219	118	169	-	-	-	-	-	-	-	-	-	-	-	
1992	497	202	142	153	-	-	-	-	-	-	-	-	-	-	-	
1993	471	201	134	136	-	-	-	-	-	-	-	-	-	-	-	
1994	930	213	97	148	472	-	-	-	-	-	-	-	-	-	-	
1995	1,067	217	76	135	639	-	-	-	-	-	-	-	-	-	-	
1996	483	214	88	144	37	-	-	-	-	-	-	-	-	-	-	
1997	487	194	98	144	51	-	-	-	-	-	-	-	-	-	-	
1998	419	192	65	127	35	-	-	-	-	-	-	-	-	-	-	
1999	2,047	206	62	130	35	1,614	-	-	-	-	-	-	-	-	-	
2000	455	168	60	146	35	46	-	-	-	-	-	-	-	-	-	
2001	9,433	156	46	116	33	46	9,036	-	-	-	-	-	-	-	-	
2002	836	150	38	117	42	50	439	-	-	-	-	-	-	-	-	
2003	2,677	155	53	125	33	56	258	1,997	-	-	-	-	-	-	-	
2004	807	145	50	134	26	26	281	145	-	-	-	-	-	-	-	
2005	663	136	50	94	24	36	248	75	-	-	-	-	-	-	-	
2006	529	115	30	92	16	36	170	70	-	-	-	-	-	-	-	
2007	2,577	148	43	89	29	41	202	47	1,978	-	-	-	-	-	-	
2008	594	122	35	48	11	24	162	44	148	-	-	-	-	-	-	
2009	439	103	28	47	19	22	134	32	54	-	-	-	-	-	-	
2010	3,983	97	21	41	8	17	108	35	34	1,891	-	-	684	1,047	-	
2011	12,133	99	30	34	8	30	109	30	30	-	5,161	-	3,041	3,281	280	
2012	4,904	74	27	33	11	3	96	23	33	-	175	2,469	198	441	1,321	
2013	5,930	70	16	43	15	-	102	30	36	-	152	103	44	261	94	4,964
2014	1,127	69	22	28	8	3	89	24	35	-	111	53	49	178	101	35
Total	73,303	14,490	5,462	6,924	1,587	2,050	11,434	2,552	2,348	1,891	5,599	2,625	4,016	5,208	1,796	5,321

Table 1:Number of observations in BIOPAREN

Source: own calculations based on SOEPv31.

13.3 How is BIOPAREN generated?

The information available in BIOPAREN is obtained in two different ways. On the one hand, BIOPAREN includes the children's proxy entries on the parents from the Biography Questionnaire and the Youth Questionnaire. On the other hand, it contains the direct entries from the parents in the case the respondent lives in the same household as his parents. Every respondent is asked for information on the regional mobility of the children, as well as on the religious affiliation of the parents. However, information on the year of birth, as well as the education and occupational training of the parents, additional to the professional position and occupation of the father are not collected due to the filter command in the questionnaire when the parents (or the father) live in the same household as the child at the time of the survey. In this case, the direct entries of the parents are used.

The identification of the parents occurs first of all through the variable \$\$STELL (relationship to head of household). The possible values of the variable \$\$STELL (waves A-BB) are listed in Table 2. The combinations of these characteristics of the \$\$STELL-variable and their assigned interpretation for the generation of parent identifiers are describe in Table 3. Starting in wave BC the range of the \$\$STELL variable was extended to capture more complex household combinations. Table 4 shows the possible values of the new \$\$STELL and Table 5 lists which combinations of this new variable were used to generate parent identifiers.

The second source of information is the population of the file \$\$KIND, which includes all children under the age of 16. The file contains the personal number of the mother, as well as the personal number of the partner of the mother. Through both variables the latest (social) mother, as well as the latest partner of the mother are identified, ideally, at the time when the child is 16 years old and thus one year before the first survey of the child. In the case the parents could not be identified by the \$\$STELL variable, this information is used.

In a further step the biological mother is identified through the mother-child relationship in the file BIOBIRTH. In the event that still no personal number for the mother exists, the number from BIOBIRTH is used. Since 2001, an extra BIOBIRTH data-set exists for fathers (formerly BIOBRTHM, since SOEPv31 BIOBIRTH and BIOBRTHM were merged), which provides a way of identifying fathers of SOEP-respondents. For those cases where no social mother/father could be identified via \$\$STELL and/or \$\$kind, the biological mother or father identifier is used.

Please note that BIOPAREN focuses on the **social** parents. **Biological** parent identifier can be found in BIOBIRTH (see also chapter on BIOBIRTH).

Table 2:Characteristics of the variable \$STELL "relationship of the person
to the head of the household" (waves A-BB)

Code	Description
0	
0	HH
1	Marital partner of the HH
2	partner of the HH
3	Daughter/son (also adopted/stepchild) of the HH
4	Foster child of the HH
5	Daughter/son-in-law of the HH
6	Father/mother of the HH
7	Father/mother-in-law of the HH
8	Brother/sister, brother/sister-in-law of the HH
9	Grandchild of the HH
10	Other relationship to the HH
11	Not related to the HH
12	Daughter/son of the partner of the HH
13	Marital partner of the HH (same sex)

Table 3: Possible Parent-Child Relationships based on \$\$STELL (waves A-BB)

Relationship of the child to the HH	Relationship of the parent to the HH	Person is
3	0	Child of HH
3	1 or 2	Child of marital/ partner of HH
4	0	Foster child of HH
4	1 or 2	Foster child of marital/ partner of HH
12	2 or 3	Child of partner of HH
9	3 or 4	Child of child/foster child of HH
0	6	Child is HH, lives with parents in same household
1 or 2	7	Marital partner/partner of HH (child of in laws of HH)
9	5	Grandchild of HH (child of son/daughter-in-law of HH)

Table 4:Characteristics of the variable \$STELL "relationship of the person to the headof the household" (starting with wave BC)

Code	Description
0	HH
11	Marital partner of the HH
12	Marital partner (same sex) of the HH
13	Partner of the HH
21	Daughter/Son of the HH
22	Stepchild (or child of partner) of the HH
23	Adopted child of the HH
24	Foster child of the HH
25	Grandchild of the HH
26	Great-grandchild of the HH
27	Daughter/son-in-law (or partner of child) of the HH
31	Father/mother of the HH
35	Father/mother-in-law of the HH
36	Grandfather/Grandmother of the HH
41	Brother/sister of the HH
42	Halfbrother/Halfsister of the HH
43	Stepbrother/stepsister of the HH
52	Brother/sister-in-law of the HH
61	Uncle, aunt of the HH
62	Niece/nephew of the HH
63	Cousin of the HH
64	other relative of the HH
71	Not related to the HH

Table 5:Possible Parent-Child Relationships based on \$\$STELL
(starting with wave BC)

Relationship of the child to the HH	Relationship of the parent to the HH
21, 22, 23, 24	0, 11, 12, 13
25	21, 22, 23
25	27
26	25
27	52
0, 41, 42	31
52	35
62	41, 42, 43
63	61

13.4 What's new in version v31?

- Full integration of FiD respondents. As can be seen in Table 1 BIOPAREN now contains individuals of all three FiD subsamples. For 328 former FiD sample members, the information was collected in 2014. For these individuals, the data was generated in the same way as for all SOEPcore members. The information from the survey years 2010 2013 was taken from the BIOPAREN file that was distributed along with FiDv4.0. Since BIOPAREN in FiD was generated in a similar way as BIOPAREN in SOEP, only few minor adaptions had to be carried out. In future waves, former FiD sample members will be treated in the same way as standard SOEP sample members.
- The update of BIOPARENv29 on BIOPARENv30 contained inconsistent information on number of siblings, brothers and sisters. This inconsistency was corrected.
- Information on parental education abroad was updated for wave BD.

- For a small number of cases parental identifier were set to missing due to inconsistencies with data from ppfad. In these cases, also the corresponding parental characteristics were set to missing.
- Inconsistent treatment of missings was corrected.

13.5 Complete list of variables in BIOPAREN

HHNR	Number of the original household
PERSNR	Personal number of the respondent (all persons)
VNR	Personal number of the father of the respondent
MNR	Personal number of the mother of the respondent
VGEBJ	Year of birth of the father
MGEBJ	Year of birth of the mother
VTODJ	Year of death of the father
MTODJ	Year of death of the mother
VAORT91	Residency of the father 1991 (Survey focus: family)
MAORT91	Residency of the mother 1991 (Survey focus: family)
VAORT96	Residency of the father 1996 (Survey focus: family)
MAORT96	Residency of the mother 1996 (Survey focus: family)
VAORT01	Residency of the father 2001 (Survey focus: family)
MAORT01	Residency of the mother 2001 (Survey focus: family)
VAORT06	Residency of the father 2006 (Survey focus: family)
MAORT06	Residency of the mother 2006 (Survey focus: family)
VAORT11	Residency of the father 2011 (Survey focus: family)
MAORT11	Residency of the mother 2011 (Survey focus: family)
VSBIL	Education of the father
MSBIL	Education of the mother
VBBIL	Vocational training of the father
MBBIL	Vocational training of the mother
VSINFO	Origin of the information on father's education
MSINFO	Origin of the information on mother's education
VBINFO	Origin of the information on father's vocational training
MBINFO	Origin of the information on mother's vocational training
VRELI	Religious affiliation of the father
MRELI	Religious affiliation of the mother
VNAT	Nationality of the father
MNAT	Nationality of the mother

VBSTELL	Professional position of the father (when the respondent was 15 years old)
VBSINFO	Origin of the information on the professional position of the father
MBSTELL	Professional position of the mother (when the respondent was 15 years old)
MBSINFO	Origin of the information on the professional position of the mother
VISCO88	Professional occupation of the father (when the respondent was 15
	years old)
MISCO88	Professional occupation of the mother (when the respondent was 15 years old)
VISEI	Prestige score of father – concept of Ganzeboom
MISEI	Prestige score of mother – concept of Ganzeboom
VMPS	Prestige score of father – Magnitude scale – Wegener
MMPS	Prestige score of mother – Magnitude scale – Wegener
VSIOPS	Prestige score of father – Treiman standard score
MSIOPS	Prestige score of mother – Treiman standard score
VEGP	Prestige score of father – Erikson – Goldthorpe class category
MEPG	Prestige score of mother – Erikson – Goldthorpe class category
VBKLAS	Occupational coding scheme father according German statistical office
MBKLAS	Occupational coding scheme mother according German statistical office
ORTKINDH	Place of childhood
ORTKIND1	Still lives in place of childhood?
ORTKIND2	Year moved out of parents' household (since 2000 no longer collected)
ORTKIND3	Still lives in parents' household (since 2000 no longer collected)
LIVING1	No. of years living with both parents
LIVING2	No. of years living alone with mother
LIVING3	No. of years living with mother and new partner of mother
LIVING4	No. of years living alone with father
LIVING5	No. of years living alone with father and new partner of father
LIVING6	No. of years living with other relatives
LIVING7	No. of years living with foster parents
LIVING8	No. of years living in youth center
VSTREIT	Conflict with father
MSTREIT	Conflict with mother

VAORTAKT	Father's place of residence
MAORTAKT	Mother's place of residence
BIOYEAR	Year of the Biography Survey
BIO	Origin of the information
ALTER	Age of the respondents
VALTER	Age of the respondent's father
MALTER	Age of the respondent's mother
MORIGIN	Country of origin of the respondent's mother
VORIGIN	Country of origin of the respondent's father
GESCHW	Sibling yes/no
GESCHWUP	Year of update of GESCHW
NUMS	Number of sisters
NUMB	Number of brothers
TWIN	Twin sister/brother

Variable	VNR / MNR
Label:	Personal number of the father of the respondent / Personal number of the mother of the respondent
Values:	(-1) PERSNR father / mother unkown
	(-2) Does not apply
	(-3) Answer improbable

Description: The personal ID of the parents (VNR and MNR) is generated in three steps.

1. The parents of the respondent are identified by the relationship to the head of the household (\$\$STELL in \$\$BRUTTO). Ideally, the children's parents are identified at the time of the first survey of the child. Furthermore, the **social** parents and not necessarily the **biological** parents are identified.

2. The parents of the respondent are identified via the mother's ID as well as the mother's partner ID in \$\$KIND. By using these variables the "oldest" parents are identified. Ideally, these are the parents at the time the child is 16 years old (one year before the first survey).

3. The biological mother-ID of the respondent can be identified in BIOBIRTH and the father-ID in BIOBRTHM (from SOEPv31 onwards both are stored in BIOBIRTH).

As BIOPAREN aims at identifying the social parents that live in the household when the child is surveyed, the steps above are carried out in the hierarchy 1-3 with step 1 having the highest priority. If one is interested in only biological parents, please have a look at the information in BIOBIRTH and BIOBRTHM.

Variable	VGEBJ / MGEBJ
Label:	Year of birth of the father / Year of birth of the mother
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable

Description: In a first step the information of the year of birth comes from the Biography Questionnaire. Due to a filter command, the children's proxy entries are only available for these variables when the parents or one parent and the child do not live in the same household at the time of the survey.

After the parents' personal numbers have been identified the information can be compared with the entries in PPFAD. If there are differences of +/- two years the VNR / MNR will be set as missing.

For the missing entries the information of the parents' year of birth is taken from PPFAD.

Variable	VTODJ / MTODJ
Label:	Year of death of the father / Year of death of the mother
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable

Description: The variables are generated as usual using the information from the Youth Questionnaire or the Biography Questionnaire and the parents' direct entries from PPFAD. As a next step the annual proxy information on a parent's death from the \$\$P-files are used. Furthermore, we use information of the month of death of a parent from the year before. That means we have information on the death of a father or a mother for the years 2002 onwards. With this data a wrong marking as "no death in 2002" / "death in 2003" can be corrected if there is data from 2003 indicating that one parent died e.g. in October 2002.

The variables VTODJ and MTODJ will be updated with new survey information. They are updated as long as the father or the mother is part of the SOEP sample. Since 2003 we additionally use the annual proxy information of respondents about reported life events of the last year.

Variable VAORT91/ MAORT91 to VAORT11/ MAORT11

Label:Residency of the father/ Residency of the motherin 1991, 1996, 2001, 2006 and 2011

Values:

(-1) No answer	(4) Lives Same Town
(-2) Does not apply	(5) Lives Other Town
(-3) Answer improbable	(6) Lives Elsewhere In Germany
(0) Has Died	(7) Lives Elsewhere
(1) Lives In Same HH	(8) Lives Else E Germany
(2) Lives In Same Housing	(9) Lives Else W Germany
(3) Lives Neighborhood	(10) Lives Foreign Country

Description: The information on the residency of the parents stems from the Youth and Biography Questionnaires as well as from the Person Questionnaire.

The information from the \$\$P-files have a higher priority. For more details see also the information on VAORTAKT / MAORTAKT.

Variable VAORTAKT/ MAORTAKT

Label: Father's place of residence / Mother's place of residence

Values:

(-1) No answer	(4) Lives Same Town			
(-2) Does not apply	(5) Lives Other Town			
(-3) Answer improbable	(6) Lives Elsewhere In Germany			
(0) Has Died	(7) Lives Elsewhere			
(1) Lives In Same HH	(8) Lives Elsewhere E Germany			
(2) Lives In Same Housing (9) Lives Elsewhere W Germany				
(3) Lives Neighborhood	(10) Lives Foreign Country			

Description: The variables VAORTAKT and MAORTAKT contain the latest available information about the parents' residence and on whether or not they are deceased, respectively.

For persons without identified parents who answered the biography questionnaire up to the year 2011, the most recent available information from the Person Questionnaire in 1991, 1996, 2001, 2006 or 2011 was assumed.

For those persons whose parents are identified in the SOEP, the information on the year of death in PPFAD was used for updating. If the year of death lies chronologically after the latest available information, VAORTAKT and MAORTAKT were put on "deceased".¹

¹ In gathering the information from different data sets, inconsistencies occurred. On the one hand, some parents had been reported as deceased in the early waves, while information about their residence at a later date was available. In this case, the information about the parents' residence was not accepted.

Variable VAORTUP / MAORTUP

Label: Year of update of VAORTAKT/MAORTAKT

Values: (-1) No answer

- (-2) Does not apply
- (-3) Answer improbable
- Description: The variable contains the year, in which the information stored in VAORTAKT and MAORTAKT has been updated.

Variable	VSBIL / MSBIL
Label:	Education of the father / Education of the mother
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
	(0) Do Not Know
	(1) Secondary School Degree
	(2) Intermediate School Degree
	(3) Technical School Degree
	(4) Upper Secondary School Degree
	(5) Other Degree
	(6) No School Degree
	(7) School Not Attended

Description: The parents' education is generated with information from the Youth Questionnaire, the Biography Questionnaire and direct entries from the \$\$PGEN-files. Due to the filter command, the children's proxy entries are only available for VSBIL / MSBIL when the parents or one parent and the child do not live in the same household at the time of the survey.

Along with other variables2 already contained in BIOPAREN, there will be an update with new survey information, insofar as no valid values exist in BIOPAREN.

VariableVBBIL/ MBBILLabel:Vocational training of the father / Vocational training of the mother

Values:

(-1) No answer	(26) Health Care School	
(-2) Does not apply	(27) Special Technical School	
(-3) Answer improbable	(28) Civil Service Training	
(0) Do Not Know	(30) Tech Engineer School	
(10) No Vocational Degree	(31) Foreign Collage	
(20) Vocational Degree	(32) College, University	
(21) Trained in Foreign Company	(40) Other Training	
(22) Trained long Time in Foreign Company (50) Currently in Vocational Training		
(23) Foreign Vocational School	(51) Currently in Schooling	
(24) Trade, Farming Apprentice		
(25) Business Apprentice		

Description: The parents' vocational training is generated the same way as the education variables (see VSBIL / MSBIL).

VSINFO/ MSINFO
Origin of the information on father's education / Origin of the information on mother's education
(-1) No answer
(-2) Does not apply
(-3) Answer improbable
(0) Do Not Know
(1) Biography-Proxy
(2) \$P-Individual Info

Description: The variable contains the origin of the information on parental education.

Variable	VBINFO/ MBINFO
Label:	Origin of the information on father's vocational training / Origin of the information on mother's vocational training
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
	(0) Do Not Know
	(1) Biography-Proxy
	(2) \$P-Individual Info

Description: The variable contains the origin of the information on parental vocational training.

Variable	VRELI/ MRELI
Label:	Religious affiliation of the father / Religious affiliation of the mother
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
	(0) Do Not Know – Proxy
	(1) Catholic
	(2) Protestant
	(3) Other Christian Denomination
	(4) Islamic Denomination
	(5) Other Denomination
	(6) No Denomination

Description: The questions about the religious affiliation of the parents are only asked to children who are not living in the household of their parents. In order to provide as much information as possible we gather data from the Person Questionnaires. The reconstruction of the information on the parents' religion is restricted to the survey years 1997, 2003 and 2007 as they are the only years where information of a respondent's religious affiliation is available. In all survey years the question was formulated differently but the information is made as consistent as possible.

Variable	VNAT/ MNAT
Label:	Nationality of the father / Nationality of the mother
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
	(1) German
	(2) Other

Description: The information on the parents' nationality is generated similar to VRELI / MRELI. The question is only asked to children who are not living in the same household as their parents. \$\$PGEN information is used to compute a variable with data from 2006 onwards. In a further step the parents' personal numbers are used to match information on parents' nationality with data from the \$\$PGEN-files in the case if there are missing entries.

Variable VBSTELL/MBSTELL

- Label:Professional position of the father (when the respondent was 15 years old) /
Professional position of the mother (when the respondent was 15 years old)
- Values: (-1) No answer
 - (-2) Does not apply
 - (-3) Answer improbable
- Description: The children's proxy entries on professional position and occupation of the father (VBSTELL) as well as VISCO88 and all prestige scores are available when the father and the child do not live in the same household at the time of the survey and if the father lived in Germany when the child was 16 years old. Since 2000, the same applies to the entries of the mother.

Besides the proxy entries parents' direct information from the \$\$P-files are used.

Variable VBSINFO/ MBSINFO

- Label: Origin of the information on the professional position of the father / Origin of the information on the professional position of the mother
- Values: (-1) No answer
 - (-2) Does not apply
 - (-3) Answer improbable
 - (0) do Not Know-Proxy
 - (1) Biography-Proxy
 - (2) \$P-Individual Info
- Description: The variables VBSINFO / MBSINFO are indicator variables. They tell whether the information is from the Biography or Youth or Person Questionnaires. This information is generated at the same steps as it is done with the VBSTELL / MBSTELL variables.

Variable VISCO88/ MISCO88

Label:Professional occupation of the father (when the respondent was 15 years old) /
Professional occupation of the mother (when the respondent was 15 years old)

Values: (-1) No answer

(-2) Does not apply

(-3) Answer improbable

Description: The variables contain the ISCO88 code for the father and mother.

VariableVISEI/ MISEILabel:Prestige score of father – concept of Ganzeboom /
Prestige score of mother – concept of Ganzeboom

Values: (-1) No answer

(-2) Does not apply

(-3) Answer improbable

Description: The variables contain the ISEI code for the father and mother.

Variable VMPS/ MMPS Label: Prestige score of father – Magnitude scale – Wegener / Prestige score of mother – Magnitude scale – Wegener Values: (-1) No answer (-2) Does not apply

- (-3) Answer improbable
- Description: The variables contain the prestige scores (magnitude scale Wegener) for the father and mother.

Variable VSIOPS/ MSIOPS Label: Prestige score of father – Treiman standard score / Prestige score of mother – Treiman standard score Values: (-1) No answer (-2) Does not apply

- (-3) Answer improbable
- Description: The variables contain the prestige scores (Treiman standard score) for the father and mother.

Variable VEGP/ MEGP Label: Prestige score of father – Erikson – Goldthorpe class category/ Prestige score of mother – Erikson – Goldthorpe class category Values: (-1) No answer (-2) Does not apply

- (-3) Answer improbable

Description: The variables contain the prestige scores (EGP) for the father and mother.

Variable VBKLAS/ MBKLAS

Label: Occupational coding scheme father according German statistical office/ Occupational coding scheme mother according German statistical office

Values: (-1) No answer

- (-2) Does not apply
- (-3) Answer improbable
- Description: The variables contain the occupational code for the father and mother according to the coding scheme of the German statistical office.

Variable ORTKINDH / ORTKIND1 / ORTKIND2 / ORTKIND3

Label:	ORTKINDH ORTKIND1 ORTKIND2 ORTKIND3	Place of childhood / Still lives in place of childhood? / Year moved out of parents' household (since 2000 no longer collected) / Still lives in parents' household (since 2000 no longer collected)

Values: (-1) No answer

(-2) Does not apply

(-3) Answer improbable

ORTKINDH: ORTKIND1:

(1) Large City	(1) Yes, Still
(2) Medium City	(2) Yes, Again
(3) Small City	(3) No
(4) Countryside	

Description: The variables provide information on the place of childhood.

Variable LIVING1 / LIVING2 / LIVING3 / LIVING4 / LIVING5 /

LIVING6 / LIVING7 / LIVING8

Label:	LIVING1	No. of years living with both parents
	LIVING2	No. of years living alone with mother
	LIVING3	No. of years living with mother and new partner of mother
	LIVING4	No. of years living alone with father
	LIVING5	No. of years living alone with father and new partner of father
	LIVING6	No. of years living with other relatives
	LIVING7	No. of years living with foster parents
	LIVING8	No. of years living in youth center

Values: (-1) No answer

- (-2) Does not apply
- (-3) Answer improbable
- Description: The variables show the total number of years for different categories of where the child lived during his childhood.

Variable VSTREIT/ MSTREIT

- Label: Conflict with father / Conflict with mother
- Values: (-1) No answer
 - (-2) Does not apply
 - (-3) Answer improbable
 - (1) Very Often
 - (2) Often
 - (3) Sometimes
 - (4) Seldom
 - (5) Never
 - (6) Person Not Present
- Description: The variables provide information on the frequency of conflicts with the parents.

Variable	BIOYEAR
Label:	Year of the Biography Survey
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable

Description: The variable BIOYEAR tells in which year the information was surveyed.

Variable	BIO
Label:	Form of Biography Questionnaire
Values:	(-1) No answer
	(-2) Does not apply
	(-3) Answer improbable
	(0) Participation before 2001
	(1) Youth
	(2) Biolela blue
	(11) FiD Youth
	(12) FiD Lela
	(13) FiD Bio Part I
	(14) FiD Bio Part II
	(15) FiD Bio Part I a. II

Description: Since 2008 the variable BIO is generated to indicate the origin of the information in BIOPAREN. This information is valid for all cases from 2001 onwards.

Variable **ALTER / VALTER / MALTER**

Label: Age of the respondents / Age of the respondent's father / Age of the respondent's mother

Values: (-1) No answer

- (-2) Does not apply
- (-3) Answer improbable
- Description: Since 2008 the variables ALTER, VALTER and MALTER were added to BIOPAREN.

The variable ALTER gives the age of the respondent at the moment of the interview. VALTER gives the age of the respondents' father when the respondent answered the Biography Questionnaire or the Youth Questionnaire. The same was applied for the mothers with the variable MALTER. In order to generate the variables the information for the parents who are identified in the SOEP was gained with data from PPFAD. The proxy entries from BIOPAREN were used when there weren't any information of the respondents parents available. If the year of death lies chronologically before the latest available information, MALTER and VALTER were put on "deceased".

Variable VORIGIN/ MORIGIN

Label: Country of origin of the respondent's father / Country of origin of the respondent's mother

Values: (-1) No answer

- (-2) Does not apply
- (-3) Answer improbable

Description: These variables give information about the country of origin of the respondents mother (MORIGIN) and father (VORIGIN). This information is collected in the Youth Questionnaires since 2007. Another source of information can be found in PPFAD by the direct-entries of the parents in the variable CORIGIN. These two kinds of information, proxy-and direct-entries, are used to generate MORIGIN and VORIGIN. In a first step we use the proxy-information for all the parents whose children made an entry in the Youth Questionnaire. For all the parents where there are no proxy-information available, we then use the direct-entries of the parents from the PPFAD-variable CORIGIN.

Variable GESCHW Label: Siblings yes/no Values: (-1) No answer (-2) Does not apply (-3) Answer improbable (1) Yes (2) No Description: GESCHW contains the inform

Description: GESCHW contains the information if a respondent has siblings or not. The question is asked since 2003 in the Biography and Youth Questionnaire. In 2003 the question was asked in the Person Questionnaire.

For more Information about siblings see also BIOSIB, BIOTWIN, and the data in the \$p-Files from the family focus questions in the Person Questionnaire (1991, 1996, 2001, 2006, 2011 and 2013).

Variable **GESCHWUP**

Label: Time of update - siblings

Values: (-1) No answer

- (-2) Does not apply
- (-3) Answer improbable
- Description: GESCHWUP contains the year, in which the sibling information was surveyed.

Variable NUMS

Label: Number of sisters

Values: (-1) No answer

(-2) Does not apply

(-3) Answer improbable

Description: Nums contains the number of sisters.

Variable NUMB

Label: Number of brothers

Values: (-1) No answer

(-2) Does not apply

(-3) Answer improbable

Description: Nums contains the number of brothers.

Variable	TWIN	
Label:	Twin sister/brother	
Values:	(-1) No answer	
	(-2) Does not apply	
	(-3) Answer improbable	
	(1) Yes, monozygotic	
	(2) Yes, dizygotic	
	(3) No	

Description: Twin contains information whether the respondent has a twin sibling.

14 BIOIMMIG: Generated and Status Variables from SOEP for Foreigners and Migrants

by Jan Goebel and Katharina Strauch

14.1 Content

The variables contained in BIOIMMIG deal with questions related to foreigners in (and migrants to) Germany. Specifically, questions concerning desire to return to the home country, the presence of relatives in the home country, reasons for coming to Germany, and conditions upon initial arrival in Germany. A complete list of variables is shown in the table with German and English labels.

14.2 Status Variables and Carrying Forth of Information

The data available in this file are longitudinal, that is to say, the same variable name refers to different time periods, differentiated by the variable SYEAR. The data is stacked for each person, such that the unit of observation is a person-year. Thus for every person, there are as many observations as interviews given by this person. Much of the information was asked only once, and "carried" forth in the following years. Frequencies can be found in SOEPINFO.

The sample in the dataset is defined by taking all available information and deleting all those persons who:

are born in Germany *and* have German nationality *and* have no valid BIOIMMIG information in any wave that they were observed.

As the data consists of person-year observations, if a person is excluded from the sample, then for all years. However if a person once belonged to the sample, then he is always included (say, even after receiving German citizenship).

List of Variables

Variable	German	English
PERSNR	Personennummer	Person Number
HHNR	Ursprüngliche HH-Nummer	Original HH Number
HHNRAKT	Aktuelle HH-Nummer für SYEAR	Current HH Number for SYEAR
SYEAR	Jahr/Erhebungsjahr	Current Year / Year Answered
BIIMGRP	BI: Status bei Einwanderung in Dt.	BI: Immigration Group
BIRESPER	BI: Status Aufenthaltserlaubnis	BI: Residence Status
BICAMP	BI: Aufnahmelager: J/N	BI: Refugee Residence Y/N
BICAMPW	BI: Aufnahmelager: Wochen	BI: Refugee Residence: Weeks
BICAMPM	BI: Aufnahmelager: Monate	BI: Refugee Residence: Months
BIWFAM	BI: Eingereist als Familienangehöriger	BI: Already had Family in Country
BIFAMC	BI: Vor Einreise Kontakte mit Pers.	BI: Contacts with Family in Germany
BIFAMCL	BI: Zuzug in Wohnort der Bekannten	BI: Moved to Same City/Town as Family
BIRBETR	BI: Gründe Zuzug D: Besser	BI: Reason Migrate: Better
BIRMONEY	BI: Gründe Zuzug D: Geld	BI: Reason Migrate: Money
BIRFREE	BI: Gründe Zuzug D: Freiheit	BI: Reason Migrate: Freedom
BIRFAM	BI: Gründe Zuzug D: Familie	BI: Reason Migrate: Family
BIRPOOR	BI: Gründe Zuzug D: Armut	BI: Reason Migrate: Poor
BIRWAR	BI: Gründe Zuzug D: Krieg	BI: Reason Migrate: War
BIRJUST	BI: Gründe Zuzug D: Einfach So	BI: Reason Migrate: Just So
BIROTHR	BI: Gründe Zuzug D: Sonstiges	BI: Reason Migrate: Other
BIEXPR	BI: Vorstellungen von Dt.	BI: Expectations in Germany
BIEXPRLV	BI: Eigene Wohnung finden	BI: Expectations: Find Apt
BIEXPRAC	BI: Von Arbeitskollegen akzeptiert	BI: Expectations: Accepted by Coworker
BIEXPRAN	BI: Von Nachbarn akzeptiert	BI: Expectations: Accepted by Neighbor
BIRELH	BI: In Heimatland Familienmitglieder	BI: Family Abroad
BIRELHP	BI: In Heimat: Eltern	BI: Family Abroad: Parents
BIRELHGP	BI: In Heimat: Großeltern	BI: Family Abroad: Grandparents
BIRELHC	BI: In Heimat: Kinder	BI: Family Abroad: Children
BIRELHBS	BI: In Heimat: Bruder, Schwester	BI: Family Abroad: Brother/Sister
BIRELHDR	BI: In Heimat: Entferntere Verwandte	BI: Family Abroad: Distant Relatives
BIRELHSP	BI: In Heimat: Ehepartner, Verlobte(r)	BI: Family Abroad: Spouse
BIRELHFR	BI: In Heimat: Bekannte/Freunde	BI: Family Abroad: Friends
BIRELHMI	BI: Personen gern nach Dt. holen?	, BI: Persons abroad bring to Germany
BIRELHS2	BI: Ehepartner in Deutschland	BI: Spouse in Germany
BIRELHC2	BI: Kinder unter 18 J. nicht in D	BI: Underage Children not in Germany
BIGOBACK	BI: Rückkehr Heimat (ab 1994)	BI: Go back home ?
BSTAY	BI: Wunsch in D zu bleiben	BI: Desire to Stay in Germany
BISTAYY	BI: Dauer des geplanten Aufenthalts	BI: Years Desired to Stay in Germany
BISCGER	BI: In Dt. Schule besucht?	BI: Attended School in Germany
BISCGRAD	BI: In welche Klasse in dt. Schule	BI: Which Grade School
BISCGERC	BI: Besuch spezieller Vorbereitung	BI: Attended Special Foreigner Prep Class
BISCGC	BI: Auch dt. Schüler in Schulklasse	BI: Also German Pupils in Class
BISCGCF	BI: Wie viel Mitschüler Ausländer	BI: How many Pupils foreign
biscgcfn	BI: Eine oder mehrere Nationalität	BI: Mix of Nationalities in Class

14.3 Updating of Time-Dependent Information

The variables found in BIOIMMIG are created first using information from the SOEP biography files, the so-called BIOLELA, \$LELA (starting with wave M) files. Additionally, starting in 2000 (wave Q), \$JUGEND is collected of 16 and 17 year-olds, containing similar information to \$LELA. In any given year, a person can have only information from \$JUGEND or \$LELA, but not both. If valid information is found in the \$LELA or \$JUGEND files for the given response year, then it is taken. Yearly valid update information is taken from the foreigner specific files APAUSL through \$PAUSL and the foreigner specific questions in MP, NP, OP and onwards. Starting with wave M, the foreigner specific variables are found in the regular \$P files, as the questionnaire is identical for natives and foreigners. Sometimes there is competing information in the biography and regular yearly person questionnaires. The most recent valid information is taken to be correct. First the \$LELA or \$JUGEND info is used and then updated with valid/non-missing information from the person questionnaire.

In 2013 the IAB-SOEP Migration Sample started. In that special sample immigrants in Germany are surveyed. Due to the fact that the survey for the immigrants is not identical to the regular questionnaire, information can only be used partly for the bioimmig file.

14.4 Using this File

The BIOIMMIG file can be used in cross-section or in panel. The usual matching variables are included: PERSNR (Person Number), HHNR (Original HH Number), HHNRAKT (Current HH Number for survey year given in SYEAR), SYEAR (Year). The data is sorted by HHNR, HHNRAKT, PERSNR, SYEAR such that there are typically many person-year observations for every person. In that sense, the data are ready to be used/matched to a longitudinal dataset. However, simply by selecting on the appropriate year in SYEAR, the file can be used cross-sectionally as well.

PERSNR	HHNR	HHNRAKT	SYEARJ	BIIMGRP	BIRESPER
101	19	19	1995	-2	-2
101	19	19	1996	2	1
101	19	19	1997	2	1
101	19	19	1998	2	1
102	19	19	1995	3	2
102	19	19	1996	3	2
102	19	19	1997	3	2

The data structure looks like the following (using fictitious data in this example):

14.5 Using BIOIMMIG as a Cross-Section

An example of how to use BIOIMMIG in a cross-section would be as follows:

(A) Open BIOIMMIG, keeping only those observations in BIOIMMIG for a particular year.

in Stata: use	bioimmig	if	erhebj==1984
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(B) Rename all the desired variables with wave-specific information.

in Stata:	rename	bicamp	camp1984
	rename	bicampw	campw1984

(C) Save the ID's and the renamed variables in a temporary file

in Stata:	sort	hhnr	persnr	
	save	/tmp/	/bioim1984,	replace

(D) Merge the temporary file to your main dataset

in Stata:	merge	hhnr	persnr	using	/tmp/bioim1984,	nokeep
	drop _	_merge	e			

(E) Repeat starting at step (A) for all years of interest, i.e. erhebj==1985

14.6 Documentation of the Variables

Below, each variable is listed and its variable and value labels are displayed in both English and German. A list of the main source variables used in the generation is provided for reference purposes. Further, there is also information as to what question the variables correspond to in the Wave 13 -M-1996 Biography Questionnaire.

BIIMGRP	BI: Status bei Einwanderung in Dt. BI: Immigration Group
BIO Question:	Q5
Comment:	The possible groups change in 2000, such that "[1] East German" and "[5] Non EU "are no longer identified starting 2000. However, as information can be carried forth from previous years, there may be valid [1] and [3] values starting 2000, but only if the information was collected before 2000.
German:	Zu welcher der folgenden Zuwanderergruppen gehörten Sie, als Sie nach Deutschland kamen? "[1] Ostdeutsche (bis 1995 erfragt) " "[2] Aussiedler,Osteuropa" "[3] Deutsche,Ausland" "[4] EU-Mitgliedsstaat (bis 2009 EG) " "[5] Asylbewerber,Fluechtling" "[6] Sonstige Auslaender" "[7] Sonstige"
English:	Which immigrant group did you belong to, when you came to Germany? "[1] East German (last time asked in 1995)" "[2] Ethnic German" "[3] German, Lived Abroad" "[4] EU-Member (up to 2009 EG)" "[5] Asylum Seeker" "[6] Other Foreign Nationality" "[7] Other"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P070Z
1995 L	BIOLELA	P070Z
1996 M	MLELA	MB070Z
1997 N	NLELA	NB070Z
1998 O	OLELA	OB070Z
1999 P	PLELA	PB070Z
2000 Q	QLELA	QB070Z
2001 R	RLELA	RB070Z
2002 S	SLELA	SB05
2003 T	TLELA	тво5
2004 U	ULELA	UB05
2005 V	VLELA	VB05
2006 W	WLELA	WB05
2007 X	XLELA	XB05
2008 Y	YLELA	YB05
2009 Z	ZLELA	ZB05
2009 Z 2010 BA	BALELA	BAB05
2010 BA 2011 BB	BBLELA	BBB05
2011 BB	BCLELA	BCB05
2012 BC 2013 BD	BDLELA	BDB06
2013 BD 2014 BE	BELELA	
2014 BE		BEB0601
2013 BD	BDP MIG	BDPM P 1002
	-	BDPM_P_1202
		BDPM_P_09
		BDPM_L_0201
		BDPM_L 01_1601
		BDPM_L01_1701
		BDPM_L01_1801
		BDPM_L 01_2001
		BDPM_L 0*_2401
		BDMP_L0*_2501
2014 BE	BEP_MIG	BEPM_L_08
		BEPM_L0*_1201
		BEPM_L0*_17
2000 Q	QJUGEND	QJ57
2001 R	RJUGEND	RJ59
2002 S	SJUGEND	SJ59
2003 T	TJUGEND	TJ59
2004 U	UJUGEND	UJ59
2005 V	VJUGEND	VJ59
2006 W	WJUGEND	WJ64
2007 X	XJUGEND	XJ64
2008 Y	YJUGEND	YJ64
2009 Z	ZJUGEND	ZJ64
2010 BA	BAJUGEND	BAJ64
2011 BB	BBJUGEND	BBJ64
2011 BB 2012 BC	BCJUGEND	BCJ64
2012 BC 2013 BD	BDJUGEND	
2013 BD 2014 BE	BEJUGEND	BDJ64
2014 DE		BEJ65

BIRESPER	BI: Status Aufenthaltserlaubnis BI: Residence Status
BIO Question:	Q6
Comment:	The possible groups change in 2000 in QLELA and QJUGEND, such that "[3] German Citizen" is included in the original question. German citizens for the purpose of this question has been recoded to -2 (does not apply). German citizenship is however recorded in NATION\$\$ in \$PGEN as usual.
German:	Haben Sie heute eine unbefristete Aufenthaltserlaubnis bzw. Aufenthaltsberechtigung oder haben Sie eine befristete Aufenthaltserlaubnis? "[1] Unbefristet" "[2] Befristet"
English:	Do you right now have a permanent or temporary residence permit? "[1] Permanent" "[2] Limited"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P080Z
1995 L	BIOLELA	P080Z
1996 M	MLELA	MB080Z
1997 N	NLELA	NB080Z
1998 O	OLELA	OB080Z
1999 P	PLELA	PB080Z
2000 Q	QLELA	QB080Z
2001 R	RLELA	RB080Z
2002 S	SLELA	SB06
2003 T	TLELA	ТВ06
2004 U	ULELA	UB06
2005 V	VLELA	VB06
2006 W	WLELA	WB06
2007 X	XLELA	XB06
2008 Y	YLELA	YB06
2009 Z	ZLELA	ZB06
2010 BA	BALELA	BAB06
2011 BB	BBLELA	BBB06
2012 BC	BCLELA	BCB06
2013 BD	BDLELA	BDB07
2014 BE	BELELA	BEB07
2013 BD	BDP MIG	BDPM L 15
2014 BE	BEP_MIG	 BEPM_L_230
2000 Q	QJUGEND	QJ58
2001 R	RJUGEND	RJ60
2002 S	SJUGEND	SJ60
2003 T	TJUGEND	TJ60
2004 U	UJUGEND	UJ60
2005 V	VJUGEND	VJ60
2006 W	WJUGEND	WJ69
2007 X	XJUGEND	XJ69
2008 Y	YJUGEND	YJ69
2009 Z	ZJUGEND	ZJ69
2010 BA	BAJUGEND	BAJ69
2011 BB	BBJUGEND	BBJ69
2012BC	BCJUGEND	BCJ71
2013 BD	BDJUGEND	BDJ71
2014 BE	BEJUGEND	BEJ73

BICAMP	BI: Aufnahmelager: J/N BI: Refugee Residence Y/N
BIO Question:	Q7a
German:	Haben Sie nach Ihrer Einreise zunächst in einem Aufnahmelager oder Übergangswohnheim gelebt? "[1] Ja" "[2] Nein"
English:	After you arrived in Germany, did you live in temporary refugee/immigrant housing or residence? "[1] Yes" "[2] No"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P090Z
1995 L	BIOLELA	P090Z
1996 M	MLELA	MB090Z
1997 N	NLELA	NB090Z
1998 O	OLELA	OB090Z
1999 P	PLELA	PB090Z
2000 Q	QLELA	QB090Z
2001 R	RLELA	RB090Z
2002 S	SLELA	SB0701
2003 T	TLELA	TB0701
2004 U	ULELA	UB0701
2005 V	VLELA	VB0701
2006 W	WLELA	WB0701
2007 X	XLELA	XB0701
2008 Y	YLELA	YB0701
2009 Z	ZLELA	ZB0701
2010 BA	BALELA	BAB0701
2011 BB	BBLELA	BBB0701
2012 BC	BCLELA	BCB0701
2013 BD	BDLELA	BDB0801
since 2014 BE	\$LELA	n/a
2000 Q	QJUGEND	QJ5901
2001 Q	RJUGEND	RJ6101
2002 S	SJUGEND	SJ6101
2003 T	TJUGEND	TJ6101
2004 U	UJUGEND	UJ6101
2005 V	VJUGEND	VJ6101
since 2006 W	\$JUGEND	n/a

See also: BICAMP, BICAMPW, BICAMPM

BICAMPW	BI: Aufnahmelager: Wochen BI: Refugee Residence: Weeks
BIO Question:	Q7b
German:	Aufnahmelager: Wenn Ja, für wie lange (Wochen)?
English:	Immigrant Residence: If so, then for how long (weeks)?
See also:	BICAMP, BICAMPW, BICAMPM

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P091Z
1995 L	BIOLELA	P091Z
1996 M	MLELA	MB091Z
1997 N	NLELA	NB091Z
1998 O	OLELA	OB091Z
1999 P	PLELA	PB091Z
2000 Q	QLELA	QB091Z
2001 R	RLELA	RB091Z
2002 S	SLELA	SB0702
2003 T	TLELA	TB0702
2004 U	ULELA	UB0702
2005 V	VLELA	VB0702
2006 W	WLELA	WB0702
2007 X	XLELA	XB0702
2008 Y	YLELA	YB0702
2009 Z	ZLELA	ZB0702
2010 BA	BALELA	BAB0702
2011 BB	BBLELA	BBB0702
2012 BC	BCLELA	BCB0702
2013 BD	BDLELA	BDB0802
Since 2014 BE	\$LELA	n/a
2000 Q	QJUGEND	QJ5902
2001 R	RJUGEND	RJ6102
2002 S	SJUGEND	SJ6102
2003 T	TJUGEND	TJ6102
2004 U	UJUGEND	UJ6102
2005 V	VJUGEND	VJ6102
since 2006 W	\$JUGEND	n/a

BICAMPM	BI: Aufnahmelager: Monate BI: Refugee Residence: Months
BIO Question:	Q7c
German:	Aufnahmelager: Wenn Ja, für wie lange (Monate)?
English:	Immigrant Residence: If so, then for how long (months)?
See also:	BICAMP, BICAMPW, BICAMPM

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P092Z
1995 L	BIOLELA	P092Z
1996 M	MLELA	MB092Z
1997 N	NLELA	NB092Z
1998 O	OLELA	OB092Z
1999 P	PLELA	PB092Z
2000 Q	QLELA	QB092Z
2001 R	RLELA	RB092Z
2002 S	SLELA	SB0703
2003 T	TLELA	TB0703
2004 U	ULELA	UB0703
2005 V	VLELA	VB0703
2006 W	WLELA	WB0703
2007 X	XLELA	XB0703
2008 Y	YLELA	YB0703
2009 Z	ZLELA	ZB0703
2010 BA	BALELA	BAB0703
2011 BB	BBLELA	BBB0703
2012 BC	BCLELA	BCB0703
2013 BD	BDLELA	BDB0803
Since 2014 BE	\$LELA	n/a
2000 Q	QJUGEND	QJ5903
2000 Q 2001 R	RJUGEND	RJ6103
2001 K 2002 S	SJUGEND	SJ6103
2002 3 2003 T	TJUGEND	TJ6103
2003 T 2004 U	UJUGEND	UJ6103
2005 V	VJUGEND	VJ6103
since 2006 W	\$JUGEND	n/a

BIWFAM	BI: Eingereist als Familienangehoeriger BI: Already had Family in Country	
BIO Question:	Q8	
German:	Als Sie einreisten, kamen Sie da als Familienangehöriger einer bereits in Deutschland lebenden Familie bzw. Person? "[1] Ja" "[2] Nein"	
English:	When you immigrated to Germany, was (at least one) a member of your family already living in Germany? "[1] Yes" "[2] No"	

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P100Z
1995 L	BIOLELA	P100Z
1996 M	MLELA	MB100Z
1997 N	NLELA	NB100Z
1998 O	OLELA	OB100Z
1999 P	PLELA	PB100Z
2000 Q	QLELA	QB100Z
2001 R	RLELA	RB100Z
2002 S	SLELA	SB08
2003 T	TLELA	TB08
2004 U	ULELA	UB08
2005 V	VLELA	VB08
2006 W	WLELA	WB08
2007 X	XLELA	XB08
2008 Y	YLELA	YB08
2009 Z	ZLELA	ZB08
2010 BA	BALELA	BAB08
2011 BB	BBLELA	BBB08
2012 BC	BCLELA	BCB08
2013 BD	BDLELA	BDB09
Since 2014 BE	\$LELA	n/a
2013 BD	BDP MIG	BDPM_L01_1801
	_	BDPM_L0*_2501
2014 BE	BEP_MIG	BEPM_L_08
2000 Q	QJUGEND	QJ60
2001 R	RJUGEND	RJ62
2002 S	SJUGEND	SJ62
2003 T	TJUGEND	TJ62
2004 U	UJUGEND	UJ62
2005 V	VJUGEND	VJ62
since 2006 W	\$JUGEND	n/a

BIFAMC	BI: Vor Einreise Kontakte mit Pers. BI: Contacts with Family in Germany
BIO Question:	Q9
German:	Hatten Sie vor der Einreise überhaupt Kontakte zu Verwandten oder Bekannte in Deutschland, an die Sie sich wenden konnten? "[1] Ja" "[2] Nein"
English:	Before immigrating to Germany, did you have any contact with relatives or friends, who could possibly help you? "[1] Yes" "[2] No"
See also:	BIFAMC, BIFAMCL

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P110Z
1995 L	BIOLELA	P110Z
1996 M	MLELA	MB110Z
1997 N	NLELA	NB110Z
1998 O	OLELA	OB110Z
1999 P	PLELA	PB110Z
2000 Q	QLELA	QB110Z
2001 R	RLELA	RB110Z
2002 S	SLELA	SB09
2003 T	TLELA	ТВ09
2004 U	ULELA	UB09
2005 V	VLELA	VB09
2006 W	WLELA	WB09
2007 X	XLELA	XB09
2008 Y	YLELA	YB09
2009 Z	ZLELA	ZB09
2010 BA	BALELA	BAB09
2011 BB	BBLELA	BBB09
2012 BC	BCLELA	BCB09
2013 BD	BDLELA	BDB10
Since 2014 BE	\$LELA	n/a
2000 Q	QJUGEND	QJ61
2000 Q 2001 R	RJUGEND	RJ63
2001 R 2002 S	SJUGEND	SJ63
2002 S 2003 T	TJUGEND	5J63 TJ63
2003 T 2004 U	UJUGEND	UJ63
2004 0 2005 V	VJUGEND	VJ63
since 2006 W	\$JUGEND	n/a

BIFAMCL	BI: Zuzug in Wohnort der Bekannten BI: Moved to Same City/Town as Family
BIO Question:	Q10
German:	Sind Sie in den Ort in Deutschland gezogen, wo diese Verwandten bzw. Bekannten lebten? "[1] Ja" "[2] Nein"
English:	Did you move to the same town/city in Germany where these relatives or friends lived? "[1] Yes" "[2] No"

BIFAMC, BIFAMCL

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P120Z
1995 L	BIOLELA	P120Z
1996 M	MLELA	MB120Z
1997 N	NLELA	NB120Z
1998 O	OLELA	OB120Z
1999 P	PLELA	PB120Z
2000 Q	QLELA	QB120Z
2001 R	RLELA	RB120Z
2002 S	SLELA	SB10
2003 T	TLELA	TB10
2004 U	ULELA	UB10
2005 V	VLELA	VB10
2006 W	WLELA	WB10
2007 X	XLELA	XB10
2008 Y	YLELA	YB10
2009 Z	ZLELA	ZB10
2010 BA	BALELA	BAB10
2011 BB	BBLELA	BBB10
2012 BC	BCLELA	BCB10
2013 BD	BDLELA	BDB11
Since 2014 BE	\$LELA	n/a
2000 Q	QJUGEND	QJ62
2001 R	RJUGEND	RJ64
2002 S	SJUGEND	SJ64
2003 T	TJUGEND	TJ64
2004 U	UJUGEND	UJ64
2005 V	VJUGEND	VJ64
since 2006 W	\$JUGEND	n/a

BIRBETR	BI: Gruende Zuzug D: Besser BI: Reason Migrate: Better
BIO Question:	Q11a
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – Ich wollte ein besseres Leben haben: Besser wohnen, mehr kaufen können usw. "[1] Besseres Leben"
English:	There are many reasons to migrate to Germany. Did the following reason playa role? – I wanted a better life. Live better, to be able to buy more etc. "[1] Better Life"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P151Z
1995 L	BIOLELA	P151Z
1996 M	MLELA	MB151Z
1997 N	NLELA	NB151Z
1998 O	OLELA	OB151Z
1999 P	PLELA	PB151Z
2000 Q	QLELA	QB151Z
2001 R	RLELA	RB151Z
2002 S	SLELA	SB1401
2003 T	TLELA	TB1401
2004 U	ULELA	UB1401
2005 V	VLELA	VB1401
2006 W	WLELA	WB1401
2007 X	XLELA	XB1401
2008 Y	YLELA	YB1401
2009 Z	ZLELA	ZB1401
2010 BA	BALELA	BAB1401
2011 BB	BBLELA	BBB1401
2012 BC	BCLELA	BCB1401
2013 BD	BDLELA	BDB1501
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRMONEY	BI: Gruende Zuzug D: Geld BI: Reason Migrate: Money
BIO Question:	Q11b
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – Ich wollte arbeiten und Geld verdienen in Deutschland, um meine Familie zu unterstützen und Geld sparen. "[1] Geld verdienen"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? - I wanted to work and earn money to support my family and save money. "[1] Earn money"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P152Z
1995 L	BIOLELA	P152Z
1996 M	MLELA	MB152Z
1997 N	NLELA	NB152Z
1998 O	OLELA	OB152Z
1999 P	PLELA	PB152Z
2000 Q	QLELA	QB152Z
2001 R	RLELA	RB152Z
2002 S	SLELA	SB1402
2003 T	TLELA	TB1402
2004 U	ULELA	UB1402
2005 V	VLELA	VB1402
2006 W	WLELA	WB1402
2007 X	XLELA	XB1402
2008 Y	YLELA	YB1402
2009 Z	ZLELA	ZB1402
2010 BA	BALELA	BAB1402
2011 BB	BBLELA	BBB1402
2012 BC	BCLELA	BCB1402
2013 BD	BDLELA	BDB1502
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRFREE	BI: Gruende Zuzug D: Freiheit BI: Reason Migrate: Freedom
BIO Question:	Q11c
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle ? – Ich wollte in der Freiheit leben. "[1] In Freiheit leben"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? – I wanted to live in freedom. "[1] Live in freedom"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P153Z
1995 L	BIOLELA	P153Z
1996 M	MLELA	MB153Z
1997 N	NLELA	NB153Z
1998 O	OLELA	OB153Z
1999 P	PLELA	PB153Z
2000 Q	QLELA	QB153Z
2001 R	RLELA	RB153Z
2002 S	SLELA	SB1403
2003 T	TLELA	TB1403
2004 U	ULELA	UB1403
2005 V	VLELA	VB1403
2006 W	WLELA	WB1403
2007 X	XLELA	XB1403
2008 Y	YLELA	YB1403
2009 Z	ZLELA	ZB1403
2010 BA	BALELA	BAB1403
2011 BB	BBLELA	BBB1403
2012 BC	BCLELA	BCB1403
2013 BD	BDLELA	BDB1503
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRFAM	BI: Gruende Zuzug D: Familie BI: Reason Migrate: Family
BIO Question:	Q11d
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – Ich wollte mit meiner Familie zusammenleben (Ehepartner, Eltern, Kinder). "[1] Mit Familie zusammen"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? – I wanted to be together with my family (spouse, parents, children). "[1] Live together with family"
See also:	BIRBETR, BIRMONEY, BIRFREE, BIRFAM, BIRPOOR, BIRWAR, BIRJUST, BIROTHR

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P154Z
1995 L	BIOLELA	P154Z
1996 M	MLELA	MB154Z
1997 N	NLELA	NB154Z
1998 O	OLELA	OB154Z
1999 P	PLELA	PB154Z
2000 Q	QLELA	QB154Z
2001 R	RLELA	RB154Z
2002 S	SLELA	SB1404
2003 T	TLELA	TB1404
2004 U	ULELA	UB1404
2005 V	VLELA	VB1404
2006 W	WLELA	WB1404
2007 X	XLELA	XB1404
2008 Y	YLELA	YB1404
2009 Z	ZLELA	ZB1404
2010 BA	BALELA	BAB1404
2011 BB	BBLELA	BBB1404
2012 BC	BCLELA	BCB1404
2013 BD	BDLELA	BDB1504
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRPOOR	BI: Gruende Zuzug D: Armut BI: Reason Migrate: Poor
BIO Question:	Q11e
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – In meinem Heimatland herrschte Not und Armut. "[1] Not/Armut in Heimat"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? – In my native country there was poverty and hunger. "[1] Poverty/Hunger at home"
C 1	

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P155Z
1995 L	BIOLELA	P155Z
1996 M	MLELA	MB155Z
1997 N	NLELA	NB155Z
1998 O	OLELA	OB155Z
1999 P	PLELA	PB155Z
2000 Q	QLELA	QB155Z
2001 R	RLELA	RB155Z
2002 S	SLELA	SB1405
2003 T	TLELA	TB1405
2004 U	ULELA	UB1405
2005 V	VLELA	VB1405
2006 W	WLELA	WB1405
2007 X	XLELA	XB1405
2008 Y	YLELA	YB1405
2009 Z	ZLELA	ZB1405
2010 BA	BALELA	BAB1405
2011 BB	BBLELA	BBB1405
2012 BC	BCLELA	BCB1405
2013 BD	BDLELA	BDB1505
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRWAR	BI: Gruende Zuzug D: Krieg BI: Reason Migrate: War
BIO Question:	Q11f
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – In meinem Heimatland konnte ich nicht in Sicherheit leben (Verfolgung, Krieg) "[1] Krieg in Heimat"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? – In my native country I could not live safely (Oppression, War). "[1] War/Oppression at home"
See also:	BIRBETR, BIRMONEY, BIRFREE, BIRFAM, BIRPOOR, BIRWAR, BIRJUST, BIROTHR

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P156Z
1995 L	BIOLELA	P156Z
1996 M	MLELA	MB156Z
1997 N	NLELA	NB156Z
1998 O	OLELA	OB156Z
1999 P	PLELA	PB156Z
2000 Q	QLELA	QB156Z
2001 R	RLELA	RB156Z
2002 S	SLELA	SB1406
2003 T	TLELA	TB1406
2004 U	ULELA	UB1406
2005 V	VLELA	VB1406
2006 W	WLELA	WB1406
2007 X	XLELA	XB1406
2008 Y	YLELA	YB1406
2009 Z	ZLELA	ZB1406
2010 BA	BALELA	BAB1406
2011 BB	BBLELA	BBB1406
2012 BC	BCLELA	BCB1406
2013 BD	BDLELA	BDB1506
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRJUST	BI: Gruende Zuzug D: Einfach So BI: Reason Migrate: Just So
BIO Question:	Q11g
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – Ich wollte einfach in Deutschland leben. "[1] Einfach in D leben"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? – I just wanted to live in Germany. "[1] Just wanted to live in Germany"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P157Z
1995 L	BIOLELA	P157Z
1996 M	MLELA	MB157Z
1997 N	NLELA	NB157Z
1998 O	OLELA	OB157Z
1999 P	PLELA	PB157Z
2000 Q	QLELA	QB157Z
2001 R	RLELA	RB157Z
2002 S	SLELA	SB1407
2003 T	TLELA	TB1407
2004 U	ULELA	UB1407
2005 V	VLELA	VB1407
2006 W	WLELA	WB1407
2007 X	XLELA	XB1407
2008 Y	YLELA	YB1407
2009 Z	ZLELA	ZB1407
2010 BA	BALELA	BAB1407
2011 BB	BBLELA	BBB1407
2012 BC	BCLELA	BCB1407
2013 BD	BDLELA	BDB1507
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIROTHR	BI: Gruende Zuzug D: Sonstiges BI: Reason Migrate: Other
BIO Question:	Q11h
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Es gibt ja unterschiedliche Gründe, nach Deutschland zu ziehen. Welche der folgenden Gründe spielten bei Ihnen eine Rolle? – Sonstige Gründe. "[1] Sonstige Gruende"
English:	There are many reasons to migrate to Germany. Did the following reason play a role? – Other reasons. "[1] Other reasons"

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P158Z
1995 L	BIOLELA	P158Z
1996 M	MLELA	MB158Z
1997 N	NLELA	NB158Z
1998 O	OLELA	OB158Z
1999 P	PLELA	PB158Z
2000 Q	QLELA	QB158Z
2001 R	RLELA	RB158Z
2002 S	SLELA	SB1408
2003 T	TLELA	TB1408
2004 U	ULELA	UB1408
2005 V	VLELA	VB1408
2006 W	WLELA	WB1408
2007 X	XLELA	XB1408
2008 Y	YLELA	YB1408
2009 Z	ZLELA	ZB1408
2010 BA	BALELA	BAB1408
2011 BB	BBLELA	BBB1408
2012 BC	BCLELA	BCB 1408
2013 BD	BDLELA	BDB1508
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIEXPR	BI: Vorstellungen von D realisiert BI: Expectations in Germany
BIO Question:	Q12
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Haben sich Ihre Vorstellungen, mit denen Sie nach Deutschland gekommen sind, im grossen und ganzen erfuellt? "[1] Ja" "[2] Nur teilweise" "[3] Nein, gar nicht"
English:	Have your original expectations of Germany been fulfilled? "[1] Yes" "[2] Only partially" "[3] No, not at all"

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BIEXPR, BIEXPRLV, BIEXPRAC, BIEXPRAN

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P160Z
1995 L	BIOLELA	P160Z
1996 M	MLELA	MB160Z
1997 N	NLELA	NB160Z
1998 O	OLELA	OB160Z
1999 P	PLELA	PB160Z
2000 Q	QLELA	QB160Z
2001 R	RLELA	RB160Z
2002 S	SLELA	SB15
2003 T	TLELA	TB15
2004 U	ULELA	UB1501
2005 V	VLELA	VB1501
2006 W	WLELA	WB1501
2007 X	XLELA	XB1501
2008 Y	YLELA	YB1501
2009 Z	ZLELA	ZB1501
2010 BA	BALELA	BAB1501
2011 BB	BBLELA	BBB1501
2012 BC	BCLELA	BCB1501
2013 BD	BDLELA	BDB16
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIEXPRLV	BI: Eigene Wohnung finden BI: Expectations: Find Apt
BIO Question:	Q13a
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Auf welchen Gebieten war es leichter oder schwerer, als sie vorher gedacht hatten? – Eine eigene Wohnung zu finden. "[1] Schwerer" "[2] Wie erwartet" "[3] Leichter" "[4] TNZ"
English:	In which areas was it harder or easier than you expected? – to find your own apartment/housing. "[1] Harder" "[2] Just as expected" "[3] Easier" "[4] Not applicable"

BIEXPR, BIEXPRLV, BIEXPRAC, BIEXPRAN

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P171Z
1995 L	BIOLELA	P171Z
1996 M	MLELA	MB171Z
1997 N	NLELA	NB171Z
1998 O	OLELA	OB171Z
1999 P	PLELA	PB171Z
2000 Q	QLELA	QB171Z
2001 R	RLELA	RB171Z
2002 S	SLELA	SB1601
2003 T	TLELA	TB1601
2004 U	ULELA	UB1502
2005 V	VLELA	VB1502
2006 W	WLELA	WB1502
2007 X	XLELA	XB1502
2008 Y	YLELA	YB1502
2009 Z	ZLELA	ZB1502
2010 BA	BALELA	BAB1502
2011 BB	BBLELA	BBB1502
2012 BC	BCLELA	BCB1502
2013 BD	BDLELA	BDB1701
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIEXPRAC	BI: Von Arbeitskollegen akzeptiert BI: Expectations: Accepted by Coworker
BIO Question:	Q13b
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Auf welchen Gebieten war es leichter oder schwerer, als sie vorher gedacht hatten? – Von den Arbeitskollegen akzeptiert zu werden. "[1] Schwerer" "[2] Wie erwartet" "[3] Leichter" "[4] TNZ"
English:	In which areas was it harder or easier than you expected? – to be accepted by your collegues at work. "[1] Harder" "[2] Just as expected" "[3] Easier" "[4] Not applicable"

BIEXPR, BIEXPRLV, BIEXPRAC, BIEXPRAN

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P172Z
1995 L	BIOLELA	P172Z
1996 M	MLELA	MB172Z
1997 N	NLELA	NB172Z
1998 O	OLELA	OB172Z
1999 P	PLELA	PB172Z
2000 Q	QLELA	QB172Z
2001 R	RLELA	RB172Z
2002 S	SLELA	SB1602
2003 T	TLELA	TB1602
2004 U	ULELA	UB1503
2005 V	VLELA	VB1503
2006 W	WLELA	WB1503
2007 X	XLELA	XB1503
2008 Y	YLELA	YB1503
2009 Z	ZLELA	ZB1503
2010 BA	BALELA	BAB1503
2011 BB	BBLELA	BBB1503
2012 BC	BCLELA	BCB1503
2013 BD	BDLELA	BDB1702
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIEXPRAN	BI: Von Nachbarn akzeptiert BI: Expectations: Accepted by Neighbor
BIO Question:	Q13c
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Auf welchen Gebieten war es leichter oder schwerer, als sie vorher gedacht hatten? – Von den Nachbarn akzeptiert zu werden. "[1] Schwerer" "[2] Wie erwartet" "[3] Leichter" "[4] TNZ"
English:	In which areas was it harder or easier than you expected? – To be accepted by your neighbors. "[1] Harder" "[2] Just as expected" "[3] Easier" "[4] Not applicable"

See also: BIEXPR, BIEXPRLV, BIEXPRAC, BIEXPRAN

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P173Z
1995 L	BIOLELA	P173Z
1996 M	MLELA	MB173Z
1997 N	NLELA	NB173Z
1998 O	OLELA	OB173Z
1999 P	PLELA	PB173Z
2000 Q	QLELA	QB173Z
2001 R	RLELA	RB173Z
2002 S	SLELA	SB1603
2003 T	TLELA	TB1603
2004 U	ULELA	UB1504
2005 V	VLELA	VB1504
2006 W	WLELA	WB1504
2007 X	XLELA	XB1504
2008 Y	YLELA	YB1504
2009 Z	ZLELA	ZB1504
2010 BA	BALELA	BAB1504
2011 BB	BBLELA	BBB1504
2012 BC	BCLELA	BCB1504
2013 BD	BDLELA	BDB1703
Since 2014 BE	\$LELA	n/a
2000	\$JUGEND	n/a

BIRELH	BI: Familienmitglieder im Heimatland oder außerhalb Deutschlands BI: Family in the home country or abroad
BIO Question:	Q14
Comment:	From 2001 onwards the variable is only identified by the parents in \$LELA and missing for \$JUGEND. A distinction between abroad and home country is not consistently possible over time.
German:	Haben Sie in dem Land, aus dem Sie kommen bzw. aus dem Ihre Familie kommt, noch Familienangehörige oder andere Ihnen nahstehende Menschen? "[1] Ja" "[2] Nein"
English:	Do you have family members or close friends in the home country you (or your family) come from? "[1] Yes" "[2] No"

See also: BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P18Z
1995 L	BIOLELA	P18Z
1996 M	MLELA	MB18Z
1997 N	NLELA	NB18Z
1998 O	OLELA	OB18Z
1999 P	PLELA	PB18Z
2000 Q	QLELA	QB18Z
2001 R	RLELA	RB0703V RB0705M
2002 S	SLELA	SB2101 SB2102
2003 T	TLELA	TB2101 TB2102
2004 U	ULELA	UB2101 UB2102
2005 V	VLELA	VB2101 VB2102
2006 W	WLELA	WB2101 WB2102
2007 X	XLELA	XB2101 XB2102
2008 Y	YLELA	YB2101 YB2102
2009 Z	ZLELA	ZB2101 ZB2102
2010 BA	BALELA	BAB2101 BAB2102
2011 BB	BBLELA	BBB22V01 BBB22M01
2012 BC	BCLELA	BCB2201 BCB2202
2013 BD	BDLELA	BDB2301 BDB2302
2014 BE	BELELA	BEB2701 BEB2702
2000 Q	QJUGEND	QJ66
2001	\$JUGEND	n/a

BIRELHP	BI: Im Ausland: Eltern	
	BI: Family Abroad: Parents	
BIO Question:	Q15a	
Comment:	This variable is used to identify any relatives starting 2001 for \$LELA and missing for all \$JUGEND starting 2001.	
German:	Personen in der Heimat: Was für Personen sind das? Eltern? "[1] Eltern"	
English:	Persons in Native Country: Who are they? Parents? "[1] Parents"	
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI, BIRELHS2, BIRELHC2, BIRELHSP, BIRELHC, BIRELH	

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P191Z
1995 L	BIOLELA	P191Z
1996 M	MLELA	MB191Z
1997 N	NLELA	NB191Z
1998 O	OLELA	OB191Z
1999 P	PLELA	PB191Z
2000 Q	QLELA	QB191Z
2001 R	RLELA	RB0703V RB0705M
2002 S	SLELA	SB2101 SB2102
2003 T	TLELA	TB2101 TB2102
2004 U	ULELA	UB2101 UB2102
2005 V	VLELA	VB2101 VB2102
2006 W	WLELA	WB2101 WB2102
2007 X	XLELA	XB2101 XB2102
2008 Y	YLELA	YB2101 YB2102
2009 Z	ZLELA	ZB2101 ZB2102
2010 BA	BALELA	BAB2101 BAB2102
2011 BB	BBLELA	BBB22V01 BBB22M01
2012 BC	BCLELA	BCB2201 BCB2202
2013 BD	BDLELA	BDB2301 BDB2302
2014 BE	BELELA	BEB2701 BEB2702
2013 BD		
2013 BD	BDP_MIG	BDPML_L_5901
2014 DE		BDPML_L_5902
2014 BE	BEP_MIG	BEPM_L_3501
		BEPM_L_3502
2000 Q	QJUGEND	QJ6701
2001	\$JUGEND	n/a

BIRELHGP BI:	In Heimat: Grosseltern	
	BI: Family Abroad: Grandparents	
BIO Question:	Q15b	
Comment:	This variable is not defined for new entrants starting 2001 (R).	
German:	Personen in der Heimat: Was für Personen sind das? Grosseltern? "[1] Grosseltern"	
English:	Persons in Native Country: Who are they? Grandparents? "[1] Grandparents"	
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI	

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P192Z
1995 L	BIOLELA	P192Z
1996 M	MLELA	MB192Z
1997 N	NLELA	NB192Z
1998 O	OLELA	OB192Z
1999 P	PLELA	PB192Z
2000 Q	QLELA	QB192Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ6702
2001	\$JUGEND	n/a

BIRELHC	BI: In Heimat: Kinder BI: Family Abroad: Children
BIO Question:	Q15c
Comment:	This variable is not defined for new entrants starting 2001 (R).
German:	Personen in der Heimat: Was für Personen sind das? Kinder? "[1] Kinder"
English:	Persons in Native Country: Who are they? Children? "[1] Children"
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI, BIRELHS2,

BIRELHC2, BIRELHSP, BIRELHC, BIRELHP

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P193Z
1995 L	BIOLELA	P193Z
1996 M	MLELA	MB193Z
1997 N	NLELA	NB193Z
1998 O	OLELA	OB193Z
1999 P	PLELA	PB193Z
2000 Q	QLELA	QB193Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ6703
2001	\$JUGEND	n/a

BIRELHBS	BI: In Heimat: Bruder, Schwester BI: Family Abroad: Brother/Sister
BIO Question:	Q15d
Comment:	This variable is not defined for new entrants starting 2001 (R).
German:	Personen in der Heimat: Was für Personen sind das? Bruder/Schwester? "[1] Bruder/Schwester"
English:	Persons in Native Country: Who are they? Brother/Sister? "[1] Brother/Sister"
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P194Z
1995 L	BIOLELA	P194Z
1996 M	MLELA	MB194Z
1997 N	NLELA	NB194Z
1998 O	OLELA	OB194Z
1999 P	PLELA	PB194Z
2000 Q	QLELA	QB194Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ6704
2001	\$JUGEND	n/a

BIRELHDR	BI: In Heimat: Entferntere Verwandte BI: Family Abroad: Distant Relatives
BIO Question:	Q15e
Comment:	This variable is not defined for new entrants starting 2001 (R).
German:	Personen in der Heimat: Was für Personen sind das? Entferntere Verwandte? "[1] Entferntere Verwandte"
English:	Persons in Native Country: Who are they? Distant Relatives? "[1] Distant Relatives"
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P195Z
1995 L	BIOLELA	P195Z
1996 M	MLELA	MB195Z
1997 N	NLELA	NB195Z
1998 O	OLELA	OB195Z
1999 P	PLELA	PB195Z
2000 Q	QLELA	QB195Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ6705
2001	\$JUGEND	n/a

BIRELHSP	BI: In Heimat: Ehepartner, Verlobte(r) BI: Family Abroad: Spouse
BIO Question:	Q15f
Comment:	This variable is not defined for new entrants starting 2001 (R).
German:	Personen in der Heimat: Was für Personen sind das? Ehepartner / Verlobte(r)? "[1] Ehepartner/Verlobte(r) "
English:	Persons in Native Country: Who are they? Spouse / Fiance(e)? "[1] Spouse/Fiance(e) "
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI, BIRELHS2, BIRELHC2, BIRELHSP, BIRELHC, BIRELHP

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P196Z
1995 L	BIOLELA	P196Z
1996 M	MLELA	MB196Z
1997 N	NLELA	NB196Z
1998 O	OLELA	OB196Z
1999 P	PLELA	PB196Z
2000 Q	QLELA	QB196Z
2001	\$LELA	n/a
2013 BD 2014 BE	BDP_MIG BEP_MIG	BDPM_P_157 BDPM_P_15301 BDPM_P_154 BEPM_P_92 BEPM_LA_8801 BEPM_P_90
2000 Q 2001	QJUGEND \$JUGEND	QJ6706 n/a

BIRELHFR	BI: In Heimat: Persoenliche Bekannte BI: Family Abroad: Friends
BIO Question:	Q15g
Comment:	This variable is not defined for new entrants starting 2001 (R).
German:	Personen in der Heimat: Was für Personen sind das? Bekannte, Freunde ? "[1] Persönliche Bekannte"
English:	Persons in Native Country: Who are they? Friends? "[1] Friends"
See also:	BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P197Z
1995 L	BIOLELA	P197Z
1996 M	MLELA	MB197Z
1997 N	NLELA	NB197Z
1998 O	OLELA	OB197Z
1999 P	PLELA	PB197Z
2000 Q	QLELA	QB197Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ6707
2001	\$JUGEND	n/a

BIRELHMI	BI: Personen gern nach Dt. holen? BI: Persons abroad bring to Germany
BIO Question:	Q16
Comment:	This variable is not defined for new entrants starting 2001 (R).
German:	Personen in der Heimat: Gibt es darunter Personen, die auch nach Deutschland kommen wollen bzw. die Sie gerne nachholen möchten? "[1] Ja" "[2] Nein"
English:	Persons in Native Country: Among those mentioned above, do some want to come to Germany, or would you like them to come to Germany? "[1] Yes" "[2] No"

See also: BIRELH, BIRELHP, BIRELHGP, BIRELHC, BIRELHBS, BIRELHDR, BIRELHSP, BIRELHFR, BIRELHMI

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P200Z
1995 L	BIOLELA	P200Z
1996 M	MLELA	MB200Z
1997 N	NLELA	NB200Z
1998 O	OLELA	OB200Z
1999 P	PLELA	PB200Z
2000 Q	QLELA	QB200Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ68
2001	\$JUGEND	n/a

BIRELHS2	BI: Ehepartner in Deutschland BI: Spouse in Germany
BIO Question:	Q15f
Comment:	This variable is not defined for new entrants starting 1996 (M) and missing for all \$JUGEND.
German:	Lebt Ihr Ehepartner in Deutschland? "[1] D hier im HH" "[2] D nicht im HH" "[3] Nicht in D"
English:	Does your spouse live in Germany? "[1] Yes, here in the HH" "[2] Yes, but NOT with me in HH" "[3] Not in Germany"

See also: BIRELHS2, BIRELHC2, BIRELHSP, BIRELHC, BIRELHP

Year	File	Variable
1984 A	APAUSL	AP58A02
1985 B	BPAUSL	n/a
1986 C	CPAUSL	CP90A01
1987 D	DPAUSL	DP92A01
1988 E	EPAUSL	EP85A01
1989 F	FPAUSL	FP102A01
1990 G	GPAUSL	GP102A01
1991 H	HPAUSL	HP102A01
1992 I	IPAUSL	IP102A01
1993 J	JPAUSL	JP102A01
1994 K	KPAUSL	KP102A01
1995 L	LPAUSL	LP110A01
1996	\$P	n/a
1984	BIOLELA	n/a
2000	\$JUGEND	n/a

BIRELHC2	BI: Kinder unter 18 J. nicht in Deutschland BI: Underage Children not in Germany
BIO Question:	Q15c
German:	Haben Sie Kinder unter 18 Jahren, die nicht in Deutschland leben? "[1] Ja" "[2] Nein"
English:	Do you have children under 18, who do not live in Germany? "[1] Yes" "[2] No"

BIRELHS2, BIRELHC2, BIRELHSP, BIRELHC, BIRELHP

Year	File	Variable
1984 A	APAUSL	AP66A01
1985 B	BPAUSL	BP95A01
1986 C	CPAUSL	CP86A01
1987 D	DPAUSL	DP88A01
1988 E	EPAUSL	n/a
1989 F	FPAUSL	FP98A01
1990 G	GPAUSL	n/a
1991 H	HPAUSL	HP98A01
1992 I	IPAUSL	n/a
1993 J	JPAUSL	JP98A01
1994 K	KPAUSL	n/a
1995 L	LPAUSL	LP106A01
1996 M	MP	MP7406
1997 N	NP	NP111A04
1998 O	OP	n/a
1999 P	PP	PP12904
2000	\$PAUSL	n/a
1984- A-	BIOLELA	n/a
2000	\$JUGEND	n/a

BIGOBACK	BI: Rueckkehr Heimat (ab 1994) BI: Go back home?
BIO Question:	Q17
Comment:	The question BIGOBACK (using BIOLELA) asks whether one intends to return home to the native country whereas BISTAY (using \$PAUSL) asks wether one intends to stay in Germany. The wording and the answer possibilities are different in both questions. Further, there is no particular reason to believe that the two variables even are consistent. Starting 2001, this is not defined for new entrants.
German:	Planen Sie selbst, in Ihr Herkunftsland wieder zurückzukehren? "[1] Ja, ganz sicher" "[2] Ja, wahrscheinlich" "[3] Eher unwahrscheinlich" "[4] Nein, sicher nicht"
English:	Are you planning to go back to live in your native country? "[1] Yes, certainly" "[2] Yes, probably" "[3] Probably not" "[4] No, Certainly not"

BIGOBACK, BISTAY, BISTAYY

Year	File	Variable
1984-93 A-J	BIOLELA	n/a
1994 K	BIOLELA	P230Z
1995 L	BIOLELA	P230Z
1996 M	MLELA	MB230Z
1997 N	NLELA	NB230Z
1998 O	OLELA	OB230Z
1999 P	PLELA	PB230Z
2000 Q	QLELA	QB230Z
2001	\$LELA	n/a
2000 Q	QJUGEND	QJ69
2001	\$JUGEND	n/a

BISTAY	BI: Wunsch in D zu bleiben BI: Desire to Stay in Germany
BIO Question:	Q17
Comment:	The question BIGOBACK (using BIOLELA) asks whether one intends to return home to the native country whereas BISTAY (using \$PAUSL) asks wether one intends to stay in Germany. The wording and the answer possibilities are different in both questions. Further, there is no particular reason to believe that the two variables even are consistent. This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Wie lange wollen Sie in Deutschland bleiben? "[1] Kehre innerhalb eines Jahres zurück" "[2] Einige Jahre und zwar" "[3] Für immer in D bleiben"
English:	How long would you like to stay in Germany? "[1] Go back within 12 months" "[2] Several years, specifically" "[3] Always stay in Germany"
See also:	BIGOBACK, BISTAY, BISTAYY

	File	Variable
1984 A	APAUSL	AP67A01
1985 B	BPAUSL	BP96A01
1986 C	CPAUSL	CP87A01
1987 D	DPAUSL	DP89A01
1988 E	EPAUSL	EP77A01
1989 F	FPAUSL	FP99A01
1990 G	GPAUSL	GP96A01
1991 H	HPAUSL	HP99A01
1992 I	IPAUSL	IP99A01
1993 J .	JPAUSL	JP99A01
1994 K	KPAUSL	KP96A01
1995 L	LPAUSL	LP107A01
1996 M	MP	MP101A01 MP100A
	NP	NP109A01 NP108A
1998 O	OP	OP11401 OP113
1999 P	PP	PP12601 PP125
2000 Q	QP	QP13401 QP133
2001 R	RP	RP12701 RP126
2002 S	SP	SP12601 SP125
2003 T	ТР	TP13301 TP132
2004 U	UP	UP13501 UP134
2005 V	VP	VP14601 VP145
2006 W	WP	WP13601 WP135
2007 X	ХР	XP14601 XP145
2008 Y	YP	YP14501 YP144
2009 Z	ZP	ZP14401 ZP143
2010 BA	BAP	BAP14601 BAP145
2011 BB	BBP	BBP14701 BBP146
2012 BC	BCP	n/a
2013 BD	BDP	BDP15001 BDP149
2014 BE	BEP	n/a
2013 BD	BDP_MIG	BDPM_P_3701
		BDPM_P_36
2014 BE	BEP_MIG	n/a
2000	\$JUGEND	n/a

BISTAYY	BI: Dauer des geplanten Aufenthalts BI: Years Desired to Stay in Germany
BIO Question:	Q17
Comment:	This variable is not defined for youths answering the \$JUGEND biography questionnaire.
German:	Wie lange wollen Sie in Deutschland bleiben? Einige Jahre und zwar
English:	How long would you like to stay in Germany? Several years, specifically
See also:	BIGOBACK, BISTAY, BISTAYY

1		1	
	Year	File	Variable
	1984 A	APAUSL	AP67A02
	1985 B	BPAUSL	BP96A02
	1986 C	CPAUSL	CP87A02
	1987 D	DPAUSL	DP89A02
	1988 E	EPAUSL	EP77A02
	1989 F	FPAUSL	FP99A02
	1990 G	GPAUSL	GP96A02
	1991 H	HPAUSL	HP99A02
	1992 I	IPAUSL	IP99A02
	1993 J	JPAUSL	JP99A02
	1994 K	KPAUSL	KP96A02
	1995 L	LPAUSL	LP107A02
	1996 M	MP	MP101A02
	1997 N	NP	NP109A02
	1998 O	OP	OP11402
	1999 P	PP	PP12602
	2000 Q	QP	QP13402
	2001 R	RP	RP12702
	2002 S	SP	SP12602
	2003 T	ТР	TP13302
	2004 U	UP	UP13502
	2005 V	VP	VP14602
	2006 W	WP	WP13602
	2007 X	ХР	XP14602
	2008 Y	YP	YP14502
	2009 Z	ZP	ZP14402
	2010 BA	BAP	BAP14602
	2011 BB	BBP	BBP14702
	2012 BC	BCP	n/a
	2013 BD	BDP	BDP15002
	2013 BD	BDP_MIG	BDPM_P_3702
	2014 BE	BEP_MIG	n/a
	2000	\$JUGEND	n/a

BISCGER	BI: In Dt. Schule besucht? BI: Attended School in Germany
BIO Question:	Q18
Comment:	This question asks only if one has ever attended a (primary/secondary) school in Germany, but does not ask whether one received a certificate/diploma, such as the generated variable \$PSBIL in the file \$PGEN .
German:	Haben Sie in Deutschland eine Schule besucht? "[1] Ja" "[2] Nein"
English:	Did you attend school in Germany? "[1] Yes" "[2] No"
See also:	BISCGER, BISCGRAD, BISCGERC, BISCGC, BISCGCF, BISCGCFN

Year	File	Variable
1984 A	APAUSL	AP06A01
1985 B	BPAUSL	BP100A01
1986 C	CPAUSL	CP100B01
1987 D	DPAUSL	DP97A01
1988 E	EPAUSL	EP90A01
1989 F	FPAUSL	FP107A
1990 G	GPAUSL	GP107A
1991 H	HPAUSL	HP107A
1992 I	IPAUSL	IP107A
1993 J	JPAUSL	JP107A
1984-93 A-J	BIOLELA	B46A
1994 K	BIOLELA	P280Z
1995 L	BIOLELA	P280Z
1996 M	MLELA	MB280Z
1997 N	NLELA	NB280Z
1998 O	OLELA	OB280Z
1999 P	PLELA	PB280Z
2000 Q	QLELA	QB280Z
2001 R	RLELA	RB280Z
2002 S	SLELA	SB11
2003 T	TLELA	TB11
2004 U	ULELA	UB11
2005 V	VLELA	VB11
2006 W	WLELA	WB11
2007 X	XLELA	XB11
2008 Y	YLELA	YB11
2009 Z	ZLELA	ZB11
2010-2012 B\$	B\$LELA	B\$B11
2013 BD	BDLELA	BDB12
Since 2014 BE	\$LELA	n/a
2013 BD	BDP_MIG	BDPM_L_70
2014 BE	BEP_MIG	BEPM_L_61
2000 Q	QJUGEND	QJ63
2001 R	RJUGEND	RJ65
2002 S	SJUGEND	SJ65
2003 T	TJUGEND	TJ65
2004 U	UJUGEND	UJ65
2005 V	VJUGEND	VJ65
		,
2006	\$JUGEND	n/a

BISCGRAD	BI: In welche Klasse in dt. Schule BI: Which Grade School
BIO Question:	Q19
Comment:	The question here is not on the highest schooling achieved, but rather what was the grade or class when one first came to Germany.
German:	In welche Klasse sind Sie in Deutschland in die Schule gekommen?
English:	Which class/grade did you attend when you came to Germany?
See also:	BISCGER, BISCGRAD, BISCGERC, BISCGC, BISCGCF,

Year	File	Variable
1984 A	APAUSL	n/a
1985 B	BPAUSL	n/a
1986 C	CPAUSL	n/a
1987 D	DPAUSL	n/a
1988 E	EPAUSL	n/a
1989 F	FPAUSL	FP108A
1990 G	GPAUSL	GP108A
1991 H	HPAUSL	HP108A
1992 I	IPAUSL	IP108A
1993 J	JPAUSL	JP108A
1984-93 A-J	BIOLELA	B47A
1994 К	BIOLELA	P290Z
1995 L	BIOLELA	P290Z
1996 M	MLELA	MB290Z
1997 N	NLELA	NB290Z
1998 O	OLELA	OB290Z
1999 P	PLELA	PB290Z
2000 Q	QLELA	QB290Z
2001 R	RLELA	RB290Z
2002 S	SLELA	SB12
2003 T	TLELA	TB12
2004 U	ULELA	UB12
2005 V	VLELA	VB12
2006 W	WLELA	WB12
2007 X	XLELA	XB12
2008 Y	YLELA	YB12
2009 Z	ZLELA	ZB12
2010-2012 B\$	B\$LELA	B\$B12
2013 BD	BDLELA	BDB13
Since 2014 BE	BELELA	n/a
2000 Q	QJUGEND	QJ64
2001 R	RJUGEND	RJ6601
2002 S	SJUGEND	SJ6601
2003 T	TJUGEND	TJ6601
2004 U	UJUGEND	UJ6601
2005 V	VJUGEND	VJ6601
2006	\$JUGEND	n/a

BISCGCFN

BISCGERC	BI: Besuch spezieller Vorbereitung	
	BI: Attended Special Foreigner Prep Class	
BIO Question:	Q20	
German:	Haben Sie vorher eine spezielle Vorbereitungsklasse für Ausländer in Deutschland besucht? "[1] Ja" "[2] Nein"	
English:	Did you attend a special preparation class for foreigners in Germany? "[1] Yes" "[2] No"	
See also:	BISCGER, BISCGRAD, BISCGERC, BISCGC, BISCGCF, BISCGCFN	

Year	File	Variable	
1984 A	APAUSL	n/a	
1985 B	BPAUSL	n/a	
1986 C	CPAUSL	n/a	
1987 D	DPAUSL	n/a	
1988 E	EPAUSL	n/a	
1989 F	FPAUSL	FP109A	
1990 G	GPAUSL	GP109A	
1991 H	HPAUSL	HP109A	
1992 I	IPAUSL	IP109A	
1993 J	JPAUSL	JP109A	
1984-93 A-J	BIOLELA	B48A	
1994 K	BIOLELA	P300Z	
1995 L	BIOLELA	P300Z	
1996 M	MLELA	MB48A	
1997 N	NLELA	NB48A	
1998 O	OLELA	OB48A	
1999 P	PLELA	PB48A	
2000 Q	QLELA	QB48A	
2001 R	RLELA	RB48A	
2002 S	SLELA	SB13	
2003 T	TLELA	TB13	
2004 U	ULELA	UB13	
2005 V	VLELA	VB13	
2006 W	WLELA	WB13	
2007 X	XLELA	XB13	
2008 Y	YLELA	YB13	
2009 Z	ZLELA	ZB13	
2010-2012 B\$	B\$LELA	B\$B13	
2013 BD	BDLELA	BDB14	
Since 2014 BE	BELELA	n/a	
2000 Q	QJUGEND	QJ65	
2001 R	RJUGEND	RJ6602	
2002 S	SJUGEND	SJ6602	
2003 T	TJUGEND	TJ6602	
2004 U	UJUGEND	UJ6602	
2005 V	VJUGEND	VJ6602	
2006	\$JUGEND	n/a	

BISCGC	BI: Auch dt. Schueler in Schulklasse BI: Also German Pupils in Class
BIO Question:	Q21a
Comment:	This variable is not defined for new entrants starting 2000 (Q) and \$JUGEND.
German:	Gab es in der Schulklasse, die Sie zuletzt in Deutschland besucht haben, auch deutsche Schüler? "[1] Ja" "[2] Nein"
English:	Were there also German children present in the class you last attended? "[1] Yes" "[2] No"

See also: BISCGER, BISCGRAD, BISCGERC, BISCGC, BISCGCF, BISCGCFN

Year	File	Variable
1984 A	APAUSL	n/a
1985 B	BPAUSL	n/a
1986 C	CPAUSL	n/a
1987 D	DPAUSL	n/a
1988 E	EPAUSL	n/a
1989 F	FPAUSL	FP110A01
1990 G	GPAUSL	GP110A01
1991 H	HPAUSL	HP110A01
1992 I	IPAUSL	IP110A01
1993 J	JPAUSL	JP110A01
1984-93 A-J	BIOLELA	B49A
1994 K	BIOLELA	B49A
1995 L	BIOLELA	B49A
1996 M	MLELA	MB49A
1997 N	NLELA	NB49A
1998 O	OLELA	OB49A
1999 P	PLELA	PB49A
2000	\$LELA	n/a
2000	\$JUGEND	n/a

BISCGCF	BI: Wieviel Mitschueler Auslaender BI: How many Pupils foreign
BIO Question:	Q21b
German:	Wie viele Ihrer Mitschueler waren Auslaender? "[1] Die meisten" "[2] Etwa 1/2" "[3] Etwa 1/4" "[4] Weniger als 1/4" "[5] Ausser mir niemand"
English:	How many of your fellow students were foreigners? "[1] Most of them" "[2] Around 1/2" "[3] Around 1/4" "[4] Less than 1/4" "[5] I was only one"
See also:	BISCGER, BISCGRAD, BISCGERC, BISCGC, BISCGCF, BISCGCFN

Year	File	Variable
	-	
1984-88 A-E 1989 F	\$PAUSL FPAUSL	n/a FP110A02
1989 F 1990 G	GPAUSL	
	HPAUSL	GP110A02
1991 H 1992 I		HP110A02
	IPAUSL	IP110A02
1993 J	JPAUSL	JP110A02
1984-93 A-J	BIOLELA	B50A
1994 K	BIOLELA	B50A
1995 L	BIOLELA	B50A
1996 M	MLELA	MB50A
1997 N	NLELA	NB50A
1998 O	OLELA	OB50A
1999 P	PLELA	PB50A
2000 Q	QLELA	QB50A
2000 Q 2001 R	RLELA	RB50A
2001 K 2002 S	SLELA	SB43
2002 S 2003 T	TLELA	TB43
2004 U	ULELA	UB43
2005 V	VLELA	VB43
2006 W	WLELA	WB43
2007 X	XLELA	XB43
2008 Y	YLELA	YB43
2009 Z	ZLELA	ZB43
2010 BA	BALELA	BAB43
2011 BB	BBLELA	BBB43
2012 BC	BCLELA	BCB44
2013 BD	BDLELA	BDB46
2014 BE	BELELA	BEB50
2013 BD	BDP_MIG	BDPM_L_75
2014 BE	BEP_MIG	BEPM_L_66
2000 Q	QJUGEND	n/a
2001 R	RJUGEND	RJ43
2002 S	SJUGEND	SJ43
2003 T	TJUGEND	TJ43
2004 U	UJUGEND	UJ43
2005 V	VJUGEND	VJ43
2006 W	WJUGEND	WJ45
2007 X	XJUGEND	XJ45
2008 Y	YJUGEND	YJ45
2009 Z	ZJUGEND	ZJ45
2010-2014 B\$	B\$JUGEND	B\$J45

BISCGCFN	BI: Eine oder mehrere Nationalitaet BI: Mix of Nationalities in Class
BIO Question:	Q21c
Comment:	This variable is not defined for new entrants starting 2000 (Q) and \$JUGEND.
German:	Gab es in dieser Klasse nur Schüler Ihrer Nationalität oder waren verschieden Nationalitäten gemischt? "[1] Nur meine Nationalitaet" "[2] Gemischt"
English:	Were there only children of your nationality, or were the nationalites mixed? "[1] Only my nationality" "[2] Mixed"

See also: BISCGER, BISCGRAD, BISCGERC, BISCGC, BISCGCF, BISCGCFN

Year	File	Variable
1984 A	APAUSL	n/a
1985 B	BPAUSL	n/a
1986 C	CPAUSL	n/a
1987 D	DPAUSL	n/a
1988 E	EPAUSL	n/a
1989 F	FPAUSL	FP110A03
1990 G	GPAUSL	GP110A03
1991 H	HPAUSL	HP110A03
1992 I	IPAUSL	IP110A03
1993 J	JPAUSL	JP110A03
1984-93 A-J	BIOLELA	B51A
1994 K	BIOLELA	B51A
1995 L	BIOLELA	B51A
1996 M	MLELA	MB51A
1997 N	NLELA	NB51A
1998 O	OLELA	OB51A
1999 P	PLELA	PB51A
2000	\$LELA	n/a
2000	\$JUGEND	n/a

15 BIORESID: Variables On Occupancy and Second Residence

by Marco Giesselmann and Mila Staneva¹

In 1994 questions with a focus on occupancy were introduced to the Biographical Questionnaire asking for the duration of residence in the current dwelling and any second residence. Questions on the second residence were also asked before 1994, but those were collected in the (blue version of the) Individual Questionnaire and therefore the corresponding variables are part of the \$P files. The information surveyed in the Biographical Questionnaire is stored in the new file BIORESID.

The variables of BIORESID are based on following questions:

Question I

When did you move into this home?

Question II

Do you have another home in which you yourself reside or spend your vacation? 2 (0) No (1) Yes => continue with question

Is this second home in western Germany (including West Berlin), in eastern Germany (including East Berlin) or abroad? Germany³ Western Germany³ Eastern Germany³ Abroad³ Which home is your main residence?

This one The other one I use both about the same

¹ Replaces earlier versions by Henning Lohmann and Sven Witzke/ Jürgen Schupp and Michael Frühling / Thorsten Schneider.

² In the years 1994 and 1995 the question was "Do you have another home, in Germany, in which you yourself reside in?"

³ The new category "abroad" was added in 1996.

³ From 1994 to 2013 Western Germany and Eastern Germany were treated as two different categories in the Question. Since 2014, these two categories are combined in one Variable ("Germany"). ⁴Requested only from 1994 to 2013

From which residence do you usually go to work?⁴ From this one From the other one Not applicable Since 2014, Western

15.1 Sources of Variables

The information for the years 1994 and 1995 stem from the file BIOLELA. Information for later years are taken from the wave-specific data sets \$LELA.

In principle, SOEP respondents answer the Biography Questionnaire only once, so every person has only one record with wave-specific information in BIORESID. For fieldwork-related reasons, very few people have answered the Biography Questionnaire twice. For these, the first interview is taken as relevant for BIORESID. Further cases are dropped if their information stems from an interview completed before 1994.

15.2 Population of Interest

The BIORESID dataset as of wave 2014 contains information on 41,407 individuals, stemming from samples A-L. The data set is supplemented every year by new respondents filling in the supplementary Biography Questionnaire.

Survey Year	n
1994	993
1995	1,075
1996	471
1997	480
1998	415
1999	2,039
2000	243
2001	8,816
2002	508
2003	2,319
2004	449
2005	299
2006	223
2007	2,232
2008	336
2009	196
2010	9,845
2011	6,860
2012	2,993
2013	398
2014	277
Total	41,407

Table 1:Survey Year in BIORESID

Status: up to wave BE (2014)

Table 2:Samples in BIORESID

Sample	n
A Germans (West)	2,105
B Foreigners (West)	733
C Germans (East)	1,418
D Immigrants 1984-93	1,395
E Supplement 1998	1,870
F Innovation 2000	9,817
G High Income 2002	2,256
H Supplement 2006	2,193
I Incentivation 2009	1,870
J Supplement 2011	5,367
K Supplement 2012	2,550
L Family Types	7,833

The information in BIORESID is treated as time-invariant. Although, in principle, it is possible to update the information on occupancy for some individuals on the basis of more recent information, we abstain from doing so for selectivity reasons.

15.3 Variable List of the Data Set BIORESID

Variable Name	Content of the Variable		
	Entries for Surveyed Person		
HHNR	Original household number (invariant)		
HHNRAKT	Current wave HH number (wave of biography interview)		
PERSNR	Never changing person ID		
SYEAR	Survey year		
	Occupancy		
BRMOVEIN	Year person moved in current dwelling		
	Second Residence		
BRSECHOM	Having a second residence		
BRSECREG	Region of second residence		
BRSECUSE	Use of second residence		
BRSECWOR	Second residence at place of work		
	Specification of Interview Situation		
BRINTA	Type of interview		
INTID	Identifier of the interviewer		

Table 3:Description of the Data Set BIORESID

15.4 Recent Changes in the Data Set

In 2012 the Biography Questionnaire was integrated in the Individual Questionnaire. This revised questionnaire version was used on the new sample K and did not contain the question about the use of the second residence. As a result respondents from sample K who have a second residence are coded with "-5" on the variable BRSECUSE.

In 2013 the new sample M was interviewed with a special version of the Biography Questionnaire which does not contain the questions on occupancy. Therefore, in this year sample M is not part of the BIORESID dataset (and still not in 2014)

In 2014, Data from the SOEP-related FID-study from the years 2010 to 2014 has been integrated in the SOEP (Sample L). Therefore, the number of cases in BIORESID has increased with SOEP Version 31 retrospectively for the years 2010 to 2013, compared with previous versions.

16 BIOEDU: Data on educational participation and transitions

by Henning Lohmann and Sven Witzke

The Socio-Economic Panel Study (SOEP) contains a broad range of variables which cover early child education and care, educational participation, educational degrees and other related topics. However, the respective questions are included in different questionnaires (e.g., personal questionnaire, household questionnaire, youth questionnaire) and the variables are not always in a format which is suited for longitudinal analyses. For instance, transitions such as school enrolment or entry into tertiary education are not documented in a single variable but can only be reconstructed by comparing the status in a wave t with the status in a wave t+1 (e.g., a transition into tertiary education took place if a person was not in university in wave t but is in university in wave t+1). Generating such variables is time-consuming and prone to errors. It is the aim of the BIOEDU dataset to provide ready-made variables on educational transitions and related topics in order to support analyses in a longitudinal perspective.

The BIOEDU dataset is primarily based on prospectively collected information. Therefore, it contains most information for those persons who have been part of the survey population at the time when they have attended school or other educational institutions. In total the dataset contains information on 86,744 persons. This is the part of the SOEP sample for which we have observed an educational transition and/or an educational degree. For the larger part of this group we have observed an educational degree only (n= 63,150). These are persons who have not been a part of the sample at the time when they participated in education or experienced educational transitions. The smaller part of the sample is more interesting for longitudinal analyse of educational participation. ¹ Depending on the age of the individual the dataset contains variables on:

- early child education and care (ECEC)
- entry into primary school
- transition to secondary school
- first exit from secondary school
- secondary school attendance after first exit from school
- first entry into and exit from vocational training
- vocational training participation after first

¹ Accordingly the first group is much older than the second group. At the time of the first observation in the sample the first group is on average 45 years old while the second group has an average age below 9 years.

- first entry into and exit from tertiary education
- tertiary education participation after first exit
- highest ever obtained educational degrees and last observed educational participation

The SOEP as a general household panel study is not specifically directed at the analysis of educational life courses. Nevertheless, right from the beginning of the panel in 1984 the survey instruments contained questions on the educational attainment of the respondents (aged 17 and older) and children younger than 17 years living in survey households. After more than 30 years of survey duration these data provide a precious source for the reconstruction of educational life courses. In the following we describe how we use these data to reconstruct educational transitions starting before school enrolment and up to post-secondary education.

The reconstruction of transitions is primarily based on yearly information on educational participation (i.e. entry and exit reconstructed from changes in participation). For later transitions there is some more information as explicit questions on the end of general school, vocational training and tertiary education are part of the questionnaires (changes during the year prior to the survey, only for persons aged 17+ years, exception: already obtained degrees before age 17 in youth questionnaire).

One remark on the variable naming conventions: The variable names always begin with "be" which stands for "biography education" (in analogy to other biography datasets). The third and fourth letter denote the type of transition or similar. For instance, t0 stands for variables on the first and t1 for the last year in child care. Variables on starting school contain a t2 and so on (up to t8= exit from tertiary education). Variables containing an x as the third letter contain information on the last observed year in education or on the highest educational degrees ever obtained (x4, x6, x8).

Using this dataset you should keep in mind that most of the information covered by the dataset is not directly asked in the SOEP questionnaires but has been derived from the combination of several variables. In the process of reconstruction assumptions have been made which we try to describe as detailed as possible in our exhaustive documentation of the dataset (see below). The more these assumptions are based on additional knowledge, e.g. provided by strict institutional regulations, the better for the reconstruction of the transitions.

The dataset covers transitions starting in early childhood up to tertiary education. For a part of the sample only one of these transitions or episodes is observed, for others the whole sequence from elementary education until the exit from tertiary education. The variable *beinfo* provides an overview on the frequencies of these different patterns. In total the dataset contains information on more than 80,000 persons. This is the part of the SOEP sample for

which we have observed an educational transition and/or an educational degree. For 553 cases we have full information (pattern 81111111).

We have provided a number of variables where we documented the process of data generation and the sources where the data stem from (betXinfo, variables with suffixes _s or _g). You could use these variables as indicators of the degree of uncertainty in the process of the reconstruction of educational transitions. The less the variables could be reconstructed just using the basic algorithm (e.g., bet2info<>"0000|0|0000"), the higher is the degree of uncertainty. The same applies to long durations between an observed exit and the observation of a matching educational degree (e.g., a high value in bet6cert_g). It is certainly advisable to check if certain deviations in the process of data generation "explain" substantial results. E.g., if children living in households where interviewed in August (this information is provided in betXinfo) have a much higher propensity of starting school late (bet2agemo), this might just be a data artefact because it is difficult to decide if the information the household provided referred to the school year which just started in August or to the school year which just ended at the time of the interview. In general, you should expect that there are no such systematic measurement errors in the reconstructed variables. But if you want to have a closer look on potential biases you could use the respective variables which document the data generation process. This documentation describes a beta version of the dataset (v31_0.1). If you have comments or encounter while using the dataset, please let us know.

This is just a brief introduction to the dataset. Way more detailed information (especially concerning the algorithms used to reconstruct information) is provided in the following publication which can be easily found on the DIW website. It is highly recommended for people interested in working with BIOEDU to have a look at it.

Lohmann, Henning / Witzke, Sven (2011): BIOEDU (beta version): Biographical data on educational participation and transitions in the German Socio-Economic Panel Study (SOEP), DIW Data Documentation 58, Berlin.

17 LIFESPELL: Information on the Pre- and Post-Survey History of SOEP-Respondents

by Martin Kroh and Hannes Neiss

Prospective panel surveys typically face the problem that no information is available on units of analysis after respondents have left the survey. The SOEP team therefore regularly conducts drop-out studies to identify the whereabouts of attritors. These studies draw on official register data and allow us to determine whether a person is still alive, is deceased, or has moved abroad since the last SOEP interview. The information is combined in a spell file LIFESPELL. This dataset reports all available information on the pre- and the post-survey history of all persons who have ever been a member of a SOEP household. The LIFESPELL file lends itself particularly to mortality research, migration research, and non-response research. It extends the period under investigation from the last SOEP interview to the last drop-out study and thus reduces the problem of selective observational probabilities of units of analysis. For users less familiar with spell files, we also provide a STATA code for converting a spell file into a long format file (person x year) at the end of this chapter.

The file includes spells for every person ever living in a SOEP household. Each spell indicates one of the following states:

- Living abroad
- Living in Germany
- Living in Germany + part of a SOEP HH¹
- Deceased
- No information about status

The information comprised by the LIFESPELL file includes the following:

- Year of birth
- Year of immigration^{*}
- Year of entry into SOEP

¹ This code does not distinguish between active and inactive respondents, such as children and temporary nonrespondents. As long as interviewers can contact the household (even though an interview might not take place), we have information on the vital status of respondents. Therefore, all HH members are coded as being in the SOEP until the HH finally drops out of the SOEP and is no longer followed up by the interviewer. * indicates that the fact is only necessary for subgroups of the population

- Year of exit out of SOEP
- Year of emigration^{*}
- Year of death

* indicates that the fact is only necessary for subgroups of the population

The year of birth, and year of immigration are self-reported (retrospective) information from personal interviews (e.g., p-files). The year of entry and exit are taken from gross information reported by the interviewer (e.g., pbrutto-files). The year of emigration and the year of death can either come from related persons in the household (e.g., deceased-files), the interviewer (e.g., pbrutto-files), or, finally, from drop-out studies (i.e., population registers).

The following register-based drop-out studies have been conducted in the past:

- a) **1992 drop-out study** The study provides information about the dates of death or emigration, or one can infer that a person was still living in Germany until 1992.
- b) 2001 drop-out study The study provides information about the dates of death or emigration, or one can infer that a person was still living in Germany until 2001. Additionally, the study allows us to analyze regional mobility within Germany. It includes HH drop-outs from 1985-1998.
- c) 2006 drop-out study This study is not a register study, but a survey among non-respondents. Attritors were contacted by mail and responded by mail. It allows us to include the year of death for those whose letters returned by post with the mark "deceased" or whose letters were answered by relatives or friends. Those who answered themselves can also be assumed to still have been living in Germany in 2006. No information is available for cases where there was no response. No information about emigration is given. The study includes drop-outs from 2001-2004.
- d) **2008 drop-out study** The latest of the studies provides information about the year of death and those still living in Germany in 2008. Emigration is captured insufficiently. It includes drop-outs from 1985-2006.

Year of study	1992	2001	2006	2008
Population at risk				
Attritors between	1984-1990	1984-1998	2001-2004	1985-2006
Overall	1,089	8,082	4,982	5,838
Identified	1,044	7,106	962	5,591
Information available				
Death	+	+	(+)	+
Emigration	+	+	(+)	(+)
Mobility within Germany		+		

LIFESPELL contains the following variables. Comments are added to clarify certain assumptions made when coding the variables.

SPELLNR

Var Label: SPELLNR "Number of spell"

Var format: SPELLNR (12)

Comment: This variable indicates the spell number.

SPELLTYP

Comment: The variable gives information about the current residence and status of the person. "Living in Germany" means that the person lives in Germany, but is not yet or no longer part of a SOEP HH. Persons who are part of a SOEP HH are given the "SOEP" code on this variable. Note that the code refers to the person being part of the gross sample, which also includes children and covers periods of temporary drop-outs as well as the final year when respondents refuse to participate. If a spell is coded "Abroad," this means a person has not yet immigrated to Germany or has already emigrated. "Deceased" indicates the spell with the year of death and finally "Gap" means that for the time marked by the spell no information about the person's status can be determined.

(4) "Deceased"

(5) "Gap"

BEGIN

Var label: BEGIN "Year in which spell begins"

END

Var label: BEGIN "Year in which spell ends"

Comment: Two consecutive spells may overlap for one year in individual cases. This happens, for instance, when refusal to respond coincides with emigration in the same year.

Var label: CENSORING "Censoring: How and why"

```
Value Label: CENSORING
```

```
(10) "left censored"
(11) "left censored: gap"
(20) "right censored"
(21) "right censored: gap"
(22) "rc: no information after SOEP"
(23) "rc: no information after 1992 study"
(24) "rc: no information after study 2001"
(25) "rc: no information after study 2006"
(26) "rc: no information after study 2008"
(27) "rc: end of survey"
(40) "spell does not exist"
(50) "not censored"
```

Comment: The variable "censoring" gives information for each spell if all necessary information is available or if the spell is (left or right) censored, and why. If some information is missing, it is indicated by "Gap." There are several instances when one or several facts are missing. For example, not every person reports a valid year of birth and year of immigration. In addition, sometimes we are able to report that a person is deceased but not the year of death. In these cases, a spell called "Gap" is inserted between the last information which is certain (e.g., exit from SOEP) and the latest point in time by which the change in status must have happened. (For example, death must have occurred before the study was conducted, so the year of the study is the year of death; between the last SOEP participated in and the year of the study is the gap spell for which no information is certain except that the respondent's death must have happened during this period.)

INFO

Var label: INFO "Origin of information of spell"

Value label:

(1) "SOEP survey"
(2) "SOEP fieldwork"
(3) "1992 study"
(4) "2001 study"
(5) "2006 study"
(6) "2008 study"
(7) "no info"

Comment: The variable indicates the information source for a spell. This can be a retrospective self-report (SOEP survey), fieldwork information provided by the interviewer (SOEP fieldwork), or a register-based drop-out study (1992, 2001, 2006, and 2008 studies).

STUDY\$\$\$\$

Comment: The variable indicates if a person was part of the drop-out study in \$\$\$\$. A further distinction is made whether or not the person could be identified in register data.

SOEP v.31 and v31.1

FLAG

Var label: FLAG "Spell information deviates from other SOEP information"

Comment: In case of conflicting information between the drop-out studies and SOEP-based information, we give higher priority to the information from the drop-out studies. If two or more studies provide different information, that from the latest study is used. In just a few cases (110), the data set includes spells that contain information deviating from other SOEP data ("flag"). This happens, for instance, if register information says persons emigrated one year prior to refusal to take part in the SOEP. In this case, both spells end/begin in the same year with the register information being corrected by one year. A change in the original register information is coded 1 on the flag variable.

The following two tables illustrate the data structure for two individuals in the SOEP. Both individuals were born abroad, moved to Germany, became part of the SOEP sample, refused to participate after several waves. The one individual finally deceased while the other remigrated. While in the first case, full information is available (no censoring), in the second case the exact year of immigration and the exact year of emigration are missing and therefore "gaps" had to be added (left and right censoring).

persnr	spellnr	spelltyp	begin	end	censoring	info
7016603	1	Living abroad	1903	1989	not censored	SOEP survey
7016603	2	Living in Germany	1990	1993	not censored	SOEP survey
7016603	3	SOEP	1994	1999	not censored	SOEP fieldwork
7016603	4	Living in Germany	2000	2003	not censored	2008 study
7016603	5	Deceased	2004	2004	not censored	2008 study

persnr	spellnr	spelltyp	begin	end	censoring	info
515802	1	Living abroad	1949	1949	right censored: gap	SOEP survey
515802	2	Gap	1950	1982	right+left censored: gap	No info
515802	3	Living in Germany	1983	1983	left censored: gap	SOEP survey
515802	4	SOEP	1984	1985	not censored	SOEP fieldwork
515802	5	Living in Germany	1986	2001	right censored: gap	Study 2001
515802	6	Gap	2002	2007	right+left censored: gap	No info
515802	7	Living abroad	2008	2008	right+left censored: gap	Study 2008

Users less familiar with analyzing spell data can easily convert the file into a long-format file (person x year). This is an example of STATA coding:

```
use lifespell.dta, clear
gen spellduration=(end-begin)+1
expand spellduration
bysort persnr spellnr: gen n=_n
gen year = begin+n-1
move year spellnr
keep persnr year spellnr spelltyp zensor info study1992 study2001 study2006
study2008 flag
compress
```

save lifelong.dta, replace