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SOEP Survey Papers
Series D - Variable Descriptions and Coding

SOEP-Core v40.1 – Codebook for the $PEQUIV (SOEP-CNEF) File 1984-2023: CNEF Variables with Extended Income Information for the SOEP

Markus M. Grabka

DIW SOEP

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Markus M. Grabka

Preface

The $PEQUIV-File (**SOEP-CNEF**) is the German part of the Cross-National Equivalent File (CNEF) with extended income information for the SOEP. This file comprises not only the aggregated income figures provided in the CNEF but also further single income components.
The CNEF is a joint effort of researchers and staff affiliated with State Ohio University, the DIW Berlin, the University of Essex, Statistics Canada, the Melbourne Institute of Applied Economics and Social Research (MI), the Korea Labor Institute and the Swiss Foundation for research in Social Sciences (FORS) funded by the National Institute on Aging and by the DIW Berlin. For extensive documentation of the CNEF cf. https://cnef.ehe.osu.edu/ or: Joachim R. Frick, Stephen P. Jenkins, Dean R. Lillard, Oliver Lipps, and Mark Wooden (2007): The Cross-National Equivalent File (CNEF) and its Member Country Household Panel Studies. In: Journal of Applied Social Science Studies, 127(4), 627-654 (http://hdl.handle.net/10419/67059).

General notes:

- In contrast to the original CNEF-data which is based on the 95% scientific use file of SOEP, the **SOEP-CNEF**-files include the full 100%-sample.
- The SOEPv40.1 release of the **SOEP-CNEF**-files has been updated to include the 2023 (wave BN) SOEP data.
- Population for **SOEP-CNEF** is made up by all members of households who were successfully interviewed (i.e., persons with $NETTO-codes 10 to 39 in the file PPFAD and $HNETTO-code 1 in the file HPFAD (since 2021, weighted=1 is used instead of $HNETTO=1).
- For longitudinal consistency, all **SOEP-CNEF** income variables are consistently expressed in EURO (1 Euro = 1,95583 DM).
- All income components are **gross**, except for household post- government income (I11102).
- Income data is missing for Sample C in 1990 and 1991 (first 2 waves of East German sample).
- Income data is missing for Sample M3/M4 (M5, M6, M7) in 2016 (2017, 2020, 2020) as not all income information was collected for this sample in the respective years.
- First time respondents of the refugee samples (M3-M5, M7, M8) got a questionnaire with a reduced set of income questions. Thus, for all households with such interviewees, household income will be underestimated and hence all weighting factors for all household members in the respective wave has been set to Nil.

An important distinction from the original CNEF data, is that the **SOEP-CNEF**-files have been expanded to also cover all of the individual income components captured in the SOEP. In principle, these single income components correspond to the originally surveyed information (which is stored in the $P, $PKAL and $H files, respectively) with some important amendments:

- Income variables are harmonized with respect to the periodicity, i.e. they give annual income (as of the previous calendar year). Components which are asked at monthly level have been multiplied by the number of months with receipt of the respective income (eventually, this implies imputation of missing number of months in the originally surveyed data as well as a longitudinally verified correction of implausible values).
- Any missing income information due to item-non response has been imputed according to the longitudinal and cross-sectional imputation procedures described in: Frick, J.R. and Grabka, M.M. (2005): Item-Non-Response on Income Questions in Panel surveys: Incidence, Imputation and the Impact on the Income Distribution. Allgemeines Statistisches Archiv (AStA) 89, 49-61.
- Any missing income information due to partial unit non response (PUNR, non responding individuals in households with at least one successful interview) has been imputed according to the longitudinal and cross-sectional imputation procedures described in: Frick, J.R.; M.M. Grabka and O. Groh-Samberg (2012): Dealing with Incomplete Household Panel Data in Inequality Research. Sociological Methods and Research, 41(1), 89-123 (https://doi.org/10.1177/00491241124407). Due to lacking detailed information about income receipt, only six income components have been imputed: individual labour income (I11110$$), social security pensions (I11108$$), unemployment benefits (IUNBY$$), maternity benefits (IMATY$$), student grants (ISTUY$$) and private transfers (IELSE$$). This information is also used to generate a more thorough measure for taxes and social contributions paid by private households.
- An imputation flag for each of these single income components has been specified. These flags take a value of 1 if item-non-response on the underlying income variable has been imputed and 0 otherwise.

General variable naming conventions for the **SOEP-CNEF**-variables: (see variable list on page 4):

- Variable names are longitudinally consistent using a two-digit suffix – instead of a four-digit suffix used in the original CNEF-files – indicating the survey year
  (wave A = 84, wave B = 85, ..., wave BN = 23, $$ =84, 85, …, 23).

Variable naming conventions for the single income components:

- Variable names related to income components at the individual level start with the prefix "I", e.g., Christmas bonus is given in variable IXMAS$$.
- The prefix "F" indicates the imputation flag, e.g. the flag variable for rental income (RENTY$$) is given by FRENTY$$.

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Variable Name I11110$$		*Name of Variable in the $PEQUIV-File*
Variable Label	Labor Earnings of Individual	
Unit of Observation	Individual / Household / Year	
Period	Annual	***Periodicity***
		Description of Variable Content
Description	This variable represents the labor earnings of each individual in the household.	
Method		***Description of Variable Creation***
	Labor earnings include wages and salary from all employment including training, primary and secondary jobs, and self-employment, plus income from bonuses, overtime, and profit-sharing. Specifically labor earnings is the sum of income from primary job, secondary job, self-employment, 13th month pay, 14th month pay, Christmas bonus pay, holiday bonus pay, miscellaneous bonus pay, and profit-sharing income.	
Format		***Variable Format in the $PEQUIV-File***
	Not formatted. This variable is in current year EURO.	
Algorithm	I11110$$ = IJOB1$$ + IJOB2$$ + ISELF$$ + IMILT$$ + I13LY$$ + I14LY$$ + IXMAS$$ + IHOLY$$ + IGRAY$$ + IOTHY$$	

Variable Name	X11101LL
Variable Label	Unique Person Number
Unit of Observation	Individual
Description	This variable provides unique identification for each individual ever surveyed in the SOEP.
Method	Transcribed variable.
Format	N/A The original survey variables provided below can be found in the file PPFAD.
Algorithm	X11101LL = PID

Variable Name	X11102$$
Variable Label	Household Identification Number
Unit of Observation	Household
Description	This variable links individuals to the households they were living in at the time of the interview. The SOEP provides yearly household identification numbers.
Method	Transcribed variable.
Format	N/A
	The original survey variables provided below can be found in the files HPFAD.
Algorithm	X11102$$ = hid_$$$$ ($$$$ = 1984, 1985, …)

Variable Name	X11103$$
Variable Label	Individual in Household at Survey
Unit of Observation	Individual
Description	Indicates whether an individual was living in the household at the time of the interview regardless of whether the individual responded to interview questions.
Method	Individuals who are members of a surveyed household are given a 1. Individuals who moved out of a SOEP household, died, or went abroad are given a 0.
Format	0 = No 1 = Yes The original survey variables provided below can be found in the file HPFAD.
Algorithm	If Ynetto >= 10 & Ynetto < 40 and Yhnetto=1 then X11103$$ = 1 else X11103$$ = 0 Since 2021: If Ynetto >= 10 & Ynetto < 40 and Weighted=1 then X11103$$ = 1 else X11103$$ = 0

Variable Name	X11104LL
Variable Label	Sub-sample Identifier
Unit of Observation	Individual
Description	This variable indicates from which sub sample an individual in the SOEP is drawn.
Method	The SOEP contains several different samples. (1) 'A 1984 Initial Sample (West)' (2) 'B 1984 Migration (until 1983, West)' (3) 'C 1990 Initial Sample (East)' (4) 'D 1994/5 Migration (1984-1994, West)' (5) 'E 1998 Refreshment' (6) 'F 2000 Refreshment' (7) 'G 2002 High Income' (8) 'H 2006 Refreshment' (9) 'I 2009 Innovation Sample' (10) 'J 2011 Refreshment' (11) 'K 2012 Refreshment' (12) 'L1 2010 Birth Cohort (2007-2010)' (13) 'L2 2010 Family Type (Low-Income, Single-Parent, Large Families)' (14) 'L3 2011 Family Type (Single-Parent, Large Families)' (15) 'M1 2013 Migration (1995-2011)' (16) 'M2 2015 Migration (2009-2013)' (17) 'M3 2016 Refugee (2013-2015)' (18) 'M4 2016 Refugee/family (2013-2015)' (19) 'M5 2017 Refugee (2013-2016)' (20) 'N 2017 Refreshment (PIAAC-L)' (21) 'O 2018 Refreshment (Social City)' (22) 'P 2019 Top Shareholder' (23) 'Q 2019 Lesbian-Gay-Bisexual (LGB) ' (24) 'M6 2020 Refugee (2016)' (25) 'M7 2020 Migration (Bulgarian, Polish, Romanian nationality 2013-2016)' (26) 'M8w 2020 Migration (Evaluation the residence act)' (27) 'R 2022 Refreshment ' (28) 'M8b 2022 Migration (Evaluation the residence act)' (29) 'M8c 2023 Migration (Evaluation the residence act)' (30) 'M9 2023 Refugee (primarily refugees from Ukraine)' The original survey variables provided below can be found in the files PPFAD/PPATHL.
Algorithm	X11104LL = psample

Variable Name	X11105$$
Variable Label	Indicator of Whether Person in Household was Interviewed
Unit of Observation	Individual
Description	Indicates whether an individual present in the household provided interview responses. Children in the household are counted as interviewed persons.
Method	Individuals in the household 16 years of age and older who are members of a surveyed household reject to give an interview are given a 0.
Format	0 = Didn't provide information 1 = Provided information The original survey variables provided below can be found in the file PPFAD. This algorithm omits individuals with survey non-responses.
Algorithm	If Ynetto >= 10 & Ynetto < 30 then X11105$$ = 1; else X11105$$ = 0;

Variable Name	D11101$$
Variable Label	Age of Individual
Unit of Observation	Individual
Description	Indicates the age of the individual in years.
Method	The SOEP records the birth date (GEBJAHR) of each individual. The current age of an individual is created by subtracting the year of birth from the current year.
Format	-1 = Item non-response 0 = Newborn up to first birthday The value of this variable ranges from 0 to 105. The original survey variables provided below can be found in the file PPFAD. This algorithm omits individuals with survey non-responses.
Algorithm	D11101$$ = SYEAR - GEBJAHR ($$=84, 85, …)

Variable Name	D11102LL
Variable Label	Gender of Individual
Unit of Observation	Individual
Description	Indicates the gender of the individual.
Method	The SOEP records the gender (SEX) of each individual. This information is acquired once and is not obtained in subsequent years. Gender is constant through time and therefore does not have a yearly suffix. This variable is missing for the few cases where information about gender was not reported and inferences about gender could not be made.
Format	-1 = Item non-response 1 = Male 2 = Female The original survey variables provided below can be found in the file PPFAD. This algorithm omits individuals with survey non-responses.
Algorithm	D11102LL = SEX

Variable Name	D11103$$
Variable Label	Race of Household Head
Unit of Observation	Individual
Description	Indicates the race of the interviewed head of household.
Method	Race is not available in the SOEP. However, to separate Germans from non-Germans use the variables about o nationality (NATION$$) which can be found in the $PGEN-files or o the information about whether a person was born in Germany (GERMBORN) or o the country of origin (CORIGIN) whereas both can be found in the PPFAD-file.
Format	-1 = no information available

Variable Name D11104$$

Variable Label Marital Status of Individual

Unit of Observation Individual

Description This variable indicates the marital status in the current survey year of all individuals in the household 16 years of age and older.

Method The married category represents individuals who are legally married and individuals who are living with a partner. Married non-German "guest workers" whose spouses remained in their native countries are given a code of 6 or 7 depending on their ages.

Format

-1 = N/A – Child / Item non-response
1 = Married / Living with a Partner
2 = Single
3 = Widowed
4 = Divorced
5 = Separated (Legally Married)

The original survey variables provided below can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: D11101__ = Age of Individual

Algorithm

```
if D11101$$ ge 16 then do
if       Yfamstd = 1,6,7 then D11104$$ = 1
else if Yfamstd = 2,8    then D11104$$ = 5
else if Yfamstd = 3      then D11104$$ = 2
else if Yfamstd = 4      then D11104$$ = 4
else if Yfamstd = 5      then D11104$$ = 3

end
if D11101$$ lt 16 then D11104$$ = -1
```

Variable Name D11105$$

Variable Label Relationship to Household Head

Unit of Observation Individual

Description This variable indicates the individual's relationship to the current survey year's head of household.

Method The relation to head variable is created by collapsing the SOEP relationship to head variable into 5 categories. These categories include spouses, life-partners, children, foster children, siblings, parents, in-laws, grandchildren, other relatives, and unrelated persons. Since 2012 (wave 29) the original SOEP variable collects more detailed information about family relationships.

Format

-1 = Item non-response
1 = Head
2 = Partner
3 = Child
4 = Relative
5 = Non-relative

The original survey variables provided below can be found in the file _PBRUTTO. This algorithm omits individuals with survey non-responses.

Algorithm

```
if i ge 1 and I le 28 then do;
  if Ystell = 0 then D11105$$ = 1
  else if Ystell = 1,2,13              then D11105$$ = 2
  else if Ystell = 3 or 4              then D11105$$ = 3
  else if Ystell = 5, 6, 7, 8, 9, 10   then D11105$$ = 4
  else if Ystell =11,12,13             then D11105$$ = 5
  else                                      D11104$$ = -1
end;

if i ge 29 then do;
   if Ystell = 0                                          then D11105$$ =1
   else if Ystell in (11,12,13)                           then D11105$$ =2
   else if Ystell in (21,22,23,24)                        then D11105$$ =3
   else if Ystell in (25,26,31,36,41,42,43,61,62,63,64) then D11105$$ =4
   else if Ystell in (27,32,33,35,45,51,52,71)            then D11105$$ =5
   else                                                        D11105$$ =-1
  end;
```

Variable Name	D11106$$
Variable Label	Number of Persons in Household
Unit of Observation	Household
Description	Indicates the number of persons in the household at the time of the interview.
Method	This information is obtained from the household head or another household member who knows about the household's composition.
Format	-1 = Item non-response The value of this variable ranges from 1 to 17. The original survey variables provided below can be found in the file _HBRUTTO. This algorithm omits individuals with survey non-responses.
Algorithm	D11106$$ = Yhhgr

Variable Name	D11107$$
Variable Label	Number of Children in Household
Unit of Observation	Household
Description	Indicates the number of persons in the household under age of 18 at the time of the interview.
Method	This variable is created by computing the number of individuals in the household under the age of 18.
Format	-1 = Item non-response The value of this variable ranges from 0 to 10. The original survey variables provided below can be found in the file $PPFAD. This algorithm omits individuals with survey non-responses. Equivalent Data File Variable Definitions: D11101__ = Age of Individual
Algorithm	if age$$ ge 0 and age$$ le 17 then sumkids$$=1 if age$$ = . and $netto in (20-27) then sumkids$$=1 D11107$$ = sum of (sumkids$$) in the household

Variable Name D11108$$

Variable Label Education With Respect to High School

Unit of Observation Individual

Description This variable indicates the highest level of education (less than high school, completed high school, or more than high school) of all individuals in the household 16 years of age and older.

Method This variable is coded as follows:

Less than = High School	Intermediate secondary school (Realschule) Lower secondary school (Hauptschule) Other None
High School =	Upper secondary school degree giving access to university studies (Abitur) Certificate of aptitude for specialized short-course higher education (Fachhochschulreife) Apprenticeship (Lehre) Specialized vocational school (Berufsfachschule)
More than = High School	School of health care (Schule des Gesundheitswesens) Specialized college of higher education, post-secondary technical (Fachhochschule) College Technical university usually requiring practical training as part of the studies (Technische Universität) Civil service training

Format

-1 = N/A – Child / Item non-response
1 = Less than High School
2 = High School
3 = More than High School

The original survey variables provided below can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: D11101__ = Age of Individual

Algorithm

```
if Ypsbil=.B then Ypsbil=0;
if Ypbbil01=.B          then Ypbbil01=0;
if Ypbbil02=.B          then Ypbbil02=0;
if Ypsbil in (1,2,5,6)  then D11108$$=1;
if Ypsbil in (3,4)      then D11108$$=2;
if Ypbbila in (3)       then D11108$$=2;
if Ypbbila in (4)       then D11108$$=3;
if Ypbbilo in (1)       then D11108$$=2;
if Ypbbilo in (2,3,4)   then D11108$$=3;
if Ypbbil01 in (1,2,4)  then D11108$$=2;
if Ypbbil01 in (3,5)    then D11108$$=3;
if Ypbbil02 in (1,2,3)  then D11108$$=3;
if D11108$$ lt 0        then D11108$$=.M;
```

Variable Name	D11109$$
Variable Label	Number of Years of Education
Unit of Observation	Individual
Description	This variable indicates the number of years of education completed at the time survey for all individuals in the household 16 years of age and older.
Method	Individuals with a school leaving degree are assigned a minimum of between 9 and 12 years of education. Individuals with a vocational degree are assigned an additional 2 to 3.5 years of education. Individuals who attended a technical college are assigned an additional 4 years of education. If an individual received a vocational college degree or attended a university outside of the FRG then the individual is assigned a total of 18 or 19 years of education. For more information about the construction of this variable see Couch, 1994.
Format	-1 = N/A – Child / Item non-response The value of this variable ranges from 7 to 18. The original survey variables provided below can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.

Algorithm	if Ybilzeit=.B then D11109$$=0;
	else D11109$$ = Ybilzeit;
	else D11109$$=-1;

Variable Name	D11112LL
Variable Label	Race of individual
Unit of Observation	Individual
Description	Indicates the race of each individual in the household.
Method	Race is not available in the SOEP.

Variable Name E11101$$

Variable Label Annual Work Hours of Individual

Unit of Observation Individual

Description This variable reports annual hours worked in the previous year for all individuals in the household 16 years of age and older.

Method There is no direct report of annual work hours in the SOEP. This variable was constructed using information on employment status in the survey year, average number of hours worked per week, and the number of months worked in the previous year (reported in the activity calendar).

Annual hours worked in the previous year is calculated by adding together the estimated annual hours of full-time, part-time (including marginal employed), vocational training and short-time work. Annual hours of work in each of these four states is calculated by multiplying the average number of hours worked per week by the number of months worked in each of these three states for the previous year and by 4.33 (the average number of weeks per month). No correction for vacation or diseases has been made.

When the state indicated in the employment status variable matches the state recorded in the monthly calendar file we use the reported average number of hours worked per week as our measure of weekly hours worked.

When the state indicated in the employment status variable does not match the state recorded in the monthly calendar file we use an imputed weekly hours value as our measure of weekly hours worked. The imputed values are based on a regression of reported log average weekly work hours separately for full-time, part-time, marginal or irregular, short-time and currently not employed individuals. Covariates are age, age squared, sex, dummy variable for children in the household, marital status, region (east or west Germany) and two education dummy variables.

There are still some cases where no annual work hours but individual labor income (I11110$$) can be observed. This finding can be explained by e.g. individuals who took maternity leave or did National Service.

Format -1 = N/A - Child
0 = Not employed in the previous year
The value of this variable ranges from 1 to 7457.

The original survey variables provided below can be found in the file __P. This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: D11101__ = Age of Individual

Algorithm

```
if D11101$$ ge 16 then E11101$$=annual work hours imputation
else  E11101$$=0
if x11104LL=15      & syear=2013 then E11101$$=-5   not collected for M1 in 2013
if x11104LL=16      & syear=2015 then E11101$$=-5   not collected for M2 in 2015
if x11104LL=17,18 & syear=2016 then E11101$$=-5   not collected for M3/4 in 2016
if x11104LL=19      & syear=2017 then E11101$$=-5   not collected for M5 in 2017
```

Variable Name	E11201$$
Variable Label	Annual Work Hours of Individual Imputed
Unit of Observation	Individual
Description	This variable indicates whether annual hours were imputed.
Method	This information is not available in the SOEP.

Variable Name	E11102$$
Variable Label	Employment Status of Individual
Unit of Observation	Individual
Description	This variable indicates employment status in the previous year for all individuals in the household 16 years of age and older.
Method	If the individual had positive wages in the previous year and worked at least 52 hours then the individual was employed. Otherwise, the individual was not employed.
Format	-1 = N/A - Child 0 = Not Employed 1 = Employed This algorithm omits individuals with survey non-responses. Equivalent Data File Variable Definitions: D11101__ = Age of Individual E11101__ = Annual Work Hours of Individual I11110__ = Individual Labor Earnings
Algorithm	if D11101$$ ge 16 then do if I11110$$ gt 0 and E11101$$ ge 52 then E11102$$=1 else E11102$$=0 end if D11101$$ lt 16 then E11102$$=-1 if x11104LL=35 & i=30 then E11102$$=-5 not collected for M1 in 2013 if x11104LL=36 & i=32 then E11102$$=-5 not collected for M2 in 2015 if x11104LL=37 & i=33 then E11102$$=-5 not collected for M3/4 in 2016 if x11104LL=19 & i=34 then E11102$$=-5 not collected for M5 in 2017

Variable Name E11103$$

Variable Label Employment Level of Individual

Unit of Observation Individual

Description This variable indicates whether any individual in the household 16 years of age and older worked full-time, part-time, or not at all in the previous year.

Method If the individual had positive wages and worked at least 1,820 hours last year (35 hours per week on average), then the individual was employed full-time. If the individual had positive wages and worked at least 52 hours but less than 1,820 hours last year, then the individual was employed part-time. Otherwise, the individual was not working

Format

-1 = N/A - Child
1 = Full Time
2 = Part Time
3 = Not Working

This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions:
D11101__ = Age of Individual
E11101__ = Annual Work Hours of Individual
E11102__ = Employment Status of Individual

Algorithm

```
if D11101$$ ge 16 then do
if E11102$$=1 then do
if E11101$$ ge 1,820 then E11103$$=1
else if E11101$$ ge 52 and E11101$$ lt 1,820 then E11103$$=2
end
if E11102$$=0 then E11103$$=3
end
if D11101$$ lt 16 then E11103$$=.-1
if x11104LL=35 & i=30 then E11103$$=-5   not collect for M1 in 2013
if x11104LL=36 & i=32 then E11103$$=-5   not collect for M2 in 2015
```

Variable Name E11104$$

Variable Label Primary Activity of Individual

Unit of Observation Individual

Description This variable indicates primary activity at the time of the survey for all individuals in the household 16 years of age and older.

Method This variable is based on the individual's self-reported employment status at the time of the interview.
If the individual reported being full-time, part-time, or marginally employed, having short-time work, performing military/civilian service, on maternity leave, or being engaged in in-company training then the individual is considered to be working now.
If the individual reported not being employed or being unemployed then the individual is considered to be not working now.
Unemployed is not a category in the recoded variable because in the original data individuals were able to choose unemployed as their employment status in 1984 through 1990 only.

Format
-1 = N/A – Child
-2 = Item-non response
1 = Working Now
2 = Not Working Now

The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Equivalent Data File Variable Definitions: D11101__ = Age of Individual

Algorithm

1984-1990:
if D11101$$ ge 16 or psample=3 then do
if VAR=1, 2, 3, 4 then E11104$$=1
else if VAR=5, 6 or 7 then E11104$$=2
else E11104$$=-2
end
else E11104$$=-1

(VAR=ap08, bp16, cp16, dp12, ep12 , fp10, gp12, zp16, $$=84-90)

1991-1995:
if D11101$$ ge 16 then do
if VAR=1, 2, 3, 4, 5, or 6 then E11104$$=1
else if VAR=7, 8 or 9 then E11104$$=2
else E11104$$=-2
end
else E11104$$=-1

(VAR=hp15, ip15, jp15, kp25, lp21, $$=91-95)

since 1996:
if D11101$$ ge 16 then do
if VAR=1, 2, 3, 4, 8 then E11104$$=1
else if VAR=5, 6, 7, 9 then E11104$$=2
else E11104$$=-2
end
else E11104$$=-1

(VAR=mp15, np11, op09, pp10, qp10, rp12, sp15, tp34, up09,vp10,wp07,xp13, yp19, zp09, bap09,bbp09,bcp11,bdp18,bep12,bfp32, bg31,bhp_33, bip_43, bjp_29, bkp_34, blp_31, mp_33, bnp_40 $$=96-…)

Variable Name	E11105$$
Variable Label	Occupation of Individual
Unit of Observation	Individual
Description	This variable indicates occupation at the time of the survey for all individuals in the household 16 years of age and older.
Method	This variable is based on the individual's self-reported occupation at the time of the interview given by ISCO-88 occupation code (IS88$$ = International standard classification of occupations). Occupation is coded as not applicable for individuals who were not working at the time of the interview.
Format	-1 = N/A – Child -2 = Item Non-response A documentation for all other values of the ISCO-88 information (IS88$$ is a variable with four digits) can be found at: http://www.ilo.org The original survey variables provided below can be found in the file _PGEN. This algorithm omits individuals with survey non-responses. Equivalent Data File Variable Definitions: E11104$$ = Primary Activity of Individual

Algorithm	if X11103$$ = 1 then do
	if E11104$$ in (5,6,7,8) then E11105$$=0;
	else if E11104$$ in (1,2,3,4) and is88$$ le 0 then E11105$$=-1;
	else if E11104$$ in (1,2,3,4) and is88$$ gt 0 then E11105$$=IS88$$;
	else E11105$$=-2;
	end;

Variable Name E11106$$

Variable Label 1 Digit Industry of Individual

Unit of Observation Individual

Description This variable indicates industry in which each individual in the household 16 years of age and older is employed at the time of the survey.

Method This variable is based on the individual's self-reported industry of occupation at the time of the interview. This variable is created by collapsing the SOEP industry variable into 10 broad categories. Industry is coded as not applicable for individuals who were not working at the time of the interview.

Format

-1 = N/A – Child / Item Non-response
0 = Not Applicable
1 = Agriculture
2 = Energy
3 = Mining
4 = Manufacturing
5 = Construction
6 = Trade
7 = Transport
8 = Bank/Insurance
9 = Services
10 = Other

The original survey variables provided below (NACE$$/NACE2$$) can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: E11104$$ = Primary Activity of Individual

Algorithm

```
if X11103$$ = 1 then do
  if       E11104$$ in (5,6,7,8) then E11106$$=0;
  else if E11104$$ in (1,2,3,4) and nace$$ le 0 then E11106$$=-1;
  else if E11104$$ in (1,2,3,4) and nace$$ gt 0  then do;
      if nace$$ in (1,2,5) then E11106$$=1;
      if nace$$ in (40,41) then E11106$$=2;
      if nace$$ in (10,11,12,13,14) then E11106$$=3;
      if nace$$ in (15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,
                    30,31,32,33,34,35,36,37,96,97,100) then E11106$$=4;
     if nace$$ in (45) then E11106$$=5;
     if nace$$ in (50,51,52,55) then E11106$$=6;
     if nace$$ in (60,61,62,63,64) then E11106$$=7;
     if nace$$ in (65,66,67) then E11106$$=8;
     if nace$$ in (70,71,72,73,74,75,80,85,90,91,92,93,95,98,99) then E11106$$=9;
   end;
else E11106$$=-2;
end;
```

Variable Name E11107$$

Variable Label 2 Digit Industry of Individual

Unit of Observation Individual

Description This variable indicates industry in which each individual in the household 16 years of age and older is employed at the time of the survey.

Method This variable is based on the individual's self-reported industry of occupation at the time of the interview (NACE$$, since 2018 NACE2_$$). Industry is coded as not applicable for individuals who were not working at the time of the interview.

Format

-1 = N/A – Child / Item Non-response
-2 = Survey Non-response

0 = Not Applicable	18= Retail
1= Agric.,Forestry	19= Train System
2= Fisheries	20= Postal System
3 = Energy/Water	21= Other Trans.
4 = Mining	22= Financial Inst
5 = Chemicals	23= Insurance
6= Synthetics	24= Restaurants
7= Earth/Clay/Stone	25 = Service Indust
8 = Iron/Steel	26 = Trash Removal
9= Mechanical Eng	27 = Educ./Sport
10= Electrical Eng	28 = Health Service
11= Wood/Paper/Print	29 = Legal Services
12= Clothing/Text	30 = Other Services
13= Food Industry	31 = Volunt./Church
14= Construction	32 = Priv. Househld
15= Constr. Relate	33 = Public Administration
16= Wholesale	34 = Social Security
17= Trading Agents	99= Not attributable

The original survey variables provided below (NACE$$) can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: E11104$$ = Primary Activity of Individual

Algorithm

```
if X11103$$ = 1 then do
if E11104$$ in (5,6,7,8) then E11107$$=0;
else if E11104$$ in (1,2,3,4) and NACE$$ le 0 then E11107$$=-1;
else if E11104$$ in (1,2,3,4) and NACE$$ gt 0 and I le 34 then do;
        if Nace$$ in (1,2)                  then E11107$$=1;
        if Nace$$ in (5)                    then E11107$$=2;
        if Nace$$ in (40,41)                then E11107$$=3;
        if Nace$$ in (10,11,12,13,14)       then E11107$$=4;
        if Nace$$ in (23,24)                then E11107$$=5;
        if Nace$$ in (25)                   then E11107$$=6;
        if Nace$$ in (26)                   then E11107$$=7;
        if Nace$$ in (27,28)                then E11107$$=8;
        if Nace$$ in (29,30,33, 34,35,36)   then E11107$$=9;
        if Nace$$ in (31,32)                then E11107$$=10;
        if Nace$$ in (20,21,22)             then E11107$$=11;
        if Nace$$ in (17,18,19)             then E11107$$=12;
        if Nace$$ in (15,16)                then E11107$$=13;
        if Nace$$ in (45)                   then E11107$$=14;
        if Nace$$ in (50,51)                then E11107$$=16;
        if Nace$$ in (52)                   then E11107$$=18;
        if Nace$$ in (60,61,62,63,64)       then E11107$$=21;
        if Nace$$ in (65)                   then E11107$$=22;
```

```
            if Nace$$ in (66,67)                  then E11107$$=23;
            if Nace$$ in (55)                     then E11107$$=24;
            if Nace$$ in (73,74)                  then E11107$$=25;
            if Nace$$ in (37,95)                  then E11107$$=26;
            if Nace$$ in (80,92)                   then E11107$$=27;
            if Nace$$ in (85)                     then E11107$$=28;
            if NACE$$ in (70,71,72,93,98,99) then E11107$$=30;
            if NACE$$ in (91)                     then E11107$$=31;
            if NACE$$ in (90)                     then E11107$$=32;
            if NACE$$ in (75)                     then E11107$$=33;
            if NACE$$ in (96,97,100)              then E11107$$=99;
  end;
else E11107$$=-2;
end
```

Variable Name

H11101$$	Number of Household members age 0-13
H11102$$	Number of Household members age 14-18
H11103$$	Number of Household members age 0-1
H11104$$	Number of Household members age 2-4
H11105$$	Number of Household members age 5-7
H11106$$	Number of Household members age 8-10
H11107$$	Number of Household members age 11-12
H11108$$	Number of Household members age 13-15
H11109$$	Number of Household members age 16-18
H11110$$	Number of Household members age 19+ or 16-18 years old and independent

Unit of Observation Household

Description These variables indicate the number of household members in the given age category living in the household at the time of the interview.

H11109$$ includes 16-18 year old youth who has not completed his or her Abitur and unmarried and living with a parent or married and separated and living with a parent. H11110$$ includes 16-18 year old youth who have completed Abitur or is in college, but exclude the head and the spouse. Only "residual" adults are counted in this variable.

Method These variables are the simple count of all individuals in the household whose age is in the listed category.

Format The value of this variable ranges from 0 to 20.

The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.

Algorithm

```
*First collapse variables for waves m-o;

* CREATE AGE GROUP VARIABLE *;
array ak101{*}      age$$;
array ak102{*}      marst$$;
array ak105{*}      hrel$$;
array age14{*}      age14$$;
array age15_18{*}   age18$$;
array chld018{*}    chld18$$;
array age0_1{*}     age1$$;
array age2_4{*}     age4$$;
array age5_7{*}     age7$$;
array age8_10{*}    age10$$;
array age11_12{*}   age12$$;
array age13_15{*}   age15$$;
array age16_18{*}   age16$$;
array adults{*}     adult$$;
array psbil{*}      $psbil;

do i = 1 to dim(ad101);
 if ad101{i}=1 then do;
   age14{i}   = 0;  age15_18{i} = 0;  chld018{i} = 0;
   age0_1{i}  = 0;  age2_4{i}   = 0;  age5_7{i}  = 0;
   age8_10{i} = 0;  age11_12{i} = 0;
   age13_15{i}= 0;  age16_18{i} = 0;  adults{i}  = 0;
   if  0 <= ak101{i} < 14 then age14{i}    = 1;
   if 14 <= ak101{i} < 19 then age15_18{i} = 1;
   chld018{i} = sum(age14{i},age15_18{i});

   *** Code up indicators for McClements scale ***;;
   if  0 <= ak101{i} <  2 then age0_1{i}   = 1;
   if  2 <= ak101{i} <  5 then age2_4{i}   = 1;
   if  5 <= ak101{i} <  8 then age5_7{i}   = 1;
```

```
  if  8 <= ak101{i} < 11 then age8_10{i}  = 1;
  if 11 <= ak101{i} < 13 then age11_12{i} = 1;
  if 13 <= ak101{i} < 16 then age13_15{i} = 1;
  if 19 <= ak101{i}      then adults{i}   = 1;

 if 16 <= age{i} < 19  then do;
   age16_18{i}=1;
   if ak102{i}=1 | psbil{i} in (3,4) then age16_18{i}=0;
   if ak105{i} in (1,2)              then age16_18{i}=0;
  end;

  if age16_18{i}=0 & (16<=age{i} < 19) then adults{i}=1;
  if age{i} lt 0 then adults{i}=1;
  if ak105{i} in (1,2) then adults{i}=0;
  if ak102{i}=1 & (16 <= age{i} < 19) then adults{i}=0;
  if age16_18{i}=1 then adults{i}=0;
 end;
end;
```

*** All variables are then summed by household id number (X11102$$)***

Variable Names	H11112$$
Variable Label	Indicator – Wife / spouse is in Household
Unit of Observation	Household
Description	These variables indicate the presence of a “wife, spouse or cohabitee” in the household.
Method	These variables are simple indicator variables that a person who is a “wife/spouse” is present in a given year.
Format	0 = Not present 1 = Present The variables provided below can be found in the $PEQUIV files. This algorithm omits individuals with survey non-responses.

Algorithm	if X11103$$=1 then do;
	H11112$$=0;
	if D11105$$=2 then H11112$$=1;
	end;

The following algorithms allow users to take Equivalent file variables and construct equivalence weights commonly used in various countries. To obtain equivalent household income, divide the equivalence scale weight into the household income variable. Here we present three typical example of equivalence weights:

Equivalence scale	**OECD Equivalence Weights**
Unit of Observation	Household
Description	Scale used by Organization for Economic Cooperation and Development (1982)
Method	Sets a single adult to be 1.0, each additional adult to be 0.7, and each child to be 0.5.
Algorithm	NEWVAR$$=(1.0+0.7*(D11106$$-H11101$$-1)+0.5*H11101$$);

Equivalence scale	**Modified OECD Equivalence Weights**
Unit of Observation	Household
Description	Scale used by Organization for Economic Cooperation and Development (1982), see also Hagenaars et al. (1994).
Method	Sets a single adult to be 1.0, each additional adult to be 0.5, and each child to be 0.3.
Algorithm	NEWVAR$$=(1.0+0.5*(D11106$$-H11101$$-1)+0.3*H11101$$);

Equivalence scale	**Other Equivalence Weights** (e.g. Square root of the Household size)
Unit of Observation	Household
Description	Household equivalence weight based upon a single international scale.
Method	The weight is based upon a scale developed in Buhmann et al. (1988). The scale is characterized by the following equation: $EI = D/S^e$ Where equivalent income (El) equals total disposable household income (D) divided by household size (S) raised to the power (e). The parameter (e) represents the elasticity of the scale rate with respect to household size. Recent international studies on income inequality and poverty sponsored by the OECD (e.g., Forster 1990; Atkinson et al. 1994), and the Statistical Office of the European Commission (Hagenaars et al. 1994) and the Ruggles (1990) study of the United States use this type of exponential equivalence scale. We adopt a value of a equal to 0.5, which is most commonly used in international comparisons.
Algorithm	NEWVAR$$=D11106$$**0.5;

Variable Name L11101$$

Variable Label Federal State of Residence

Unit of Observation Household

Description This variable indicates the German federal state in which the household was located at the time of the survey

Method N/A

Format

-1 = Item non-response
1 = Schleswig-Holstein
2 = Hamburg
3 = Lower Saxony
4 = Bremen
5 = North-Rhine-Westfalia
6 = Hessen
7 = Rheinland-Pfalz
8 = Baden-Wuerttemberg
9 = Bavaria
10 = Saarland
11 = Berlin
12 = Brandenburg
13 = Mecklenburg-Vorpommern
14 = Saxony
15 = Saxony-Anhalt
16 = Thuringia

These states can be collapsed into regions. From 1984 through 1989 three regions can be defined to include the following states:

North: Schleswig-Holstein (1), Hamburg (2), Lower-Saxony (3), Bremen (4), Berlin (11)
South: Hessen (6), Baden-Wuerttemberg (8), Bavaria (9)
West: North-Rhine-Westfalia (5), Rheinland-Pfalz (7), Saarland (10)

From 1990 to present four regions can be defined to include the following states:
North: Schleswig-Holstein (1), Hamburg (2), Lower-Saxony (3), Bremen (4)
South: Hessen (6), Baden-Wuerttemberg (8), Bavaria (9)
West: North-Rhine-Westfalia (5), Rheinland-Pfalz (7), Saarland (10)
East: Berlin (11), Brandenburg (12) Mecklenburg-Vorpommern (13), Saxony (14), Saxony-Anhalt (15), Thueringen (16),

This algorithm omits individuals with survey non-responses.
Original variables below can be found in _HBRUTTO files

Algorithm L11101$$=Ybula

Variable Name	L11102$$
Variable Label	Region of Residence
Unit of Observation	Household
Description	This variable indicates whether the household was located in the former East or West Germany at the time of the survey
Method	N/A
Format	-1 = Item non-response 1 = West Germany 2 = East Germany This algorithm omits individuals with survey non-responses. Original variables below can be found in _HBRUTTO files
Algorithm	L11102$$=1 ($$=84-90) L11102$$=Ysampreg ($$=90, …)

Variable Name Y11101$$

Variable Label Consumer Price Index

Unit of Observation Year

Description This variable provides consumer price indices necessary to convert current Euro amounts into constant Euro amounts. The base income year is 2020 (survey year 2021).

Method This value of this variable is derived from the Federal Statistical Office (DESTATIS).

To convert 1985 household labor income into 1992 euro, for example, multiply 1985 household labor income by the ratio of the 1992 consumer price index to the 1985 consumer price index.
Example: I1110385 * (Y1110192/Y1110185)

	Price Index for West German States	**Price Index for East German States**
1984:	Y1110184 = 54.5	N/A
1985:	Y1110185 = 55.8	N/A
1986:	Y1110186 = 56.9	N/A
1987:	Y1110187 = 56.9	N/A
1988:	Y1110188 = 57.0	N/A
1989:	Y1110189 = 57.7	N/A
1990:	Y1110190 = 59.4	N/A
1991:	Y1110191 = 60.9	N/A
1992:	Y1110192 = 63.2	Y1110192 = 53.6
1993:	Y1110193 = 65.7	Y1110193 = 60.8
1994:	Y1110194 = 68.0	Y1110194 = 67.2
1995:	Y1110195 = 69.9	Y1110195 = 69.7
1996:	Y1110196 = 71.0	Y1110196 = 71.0
1997:	Y1110197 = 71.9	Y1110197 = 72.3
1998:	Y1110198 = 73.3	Y1110198 = 74.0
1999:	Y1110199 = 73.9	Y1110199 = 74.8
2000:	Y1110100 = 74.4	Y1110100 = 75.0

Price Index for German States

2001:	Y1110101 = 75.5	2023:	Y1110121 = 110.2
2002:	Y1110102 = 77.0		
2003:	Y1110103 = 78.1		
2004:	Y1110104 = 78.9		
2005:	Y1110105 = 80.2		
2006:	Y1110106 = 81.5		
2007:	Y1110107 = 82.8		
2008:	Y1110108 = 84.7		
2009:	Y1110109 = 86.9		
2010:	Y1110110 = 87.2		
2011:	Y1110111 = 88.1		
2012:	Y1110112 = 90.0		
2013:	Y1110113 = 91.7		
2014:	Y1110114 = 93.1		
2015:	Y1110115 = 94.0		
2016:	Y1110116 = 94.5		
2017:	Y1110117 = 95.0		
2018:	Y1110118 = 96.4		
2019:	Y1110119 = 98.1		
2020:	Y1110120 = 99.5		
2021:	Y1110121 = 100.0		
2022:	Y1110121 = 103.1		

Variable Name	I11101$$
Variable Label	Household Pre-Government Income
Unit of Observation	Household
Period	Annual
Description	This variable represents the combined gross income before taxes and government transfers in the previous year of all individuals in the household 16 years of age and older.
Method	This variable is the sum of total family income from labor earnings, asset flows, private retirement income and private transfers. Labor earnings include wages and salary from all employment including training, self-employment income, and bonuses, overtime, and profit-sharing. Asset flows include income from interest, dividends, and rent. Private transfers include payments from individuals outside of the household including alimony and child support payments.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. This algorithm omits individuals with survey non-responses. Equivalent Data File Variable Definitions: I11103__ = Household Labor Earnings I11104__ = Household Asset Income I11106__ = Household Private Transfers I11117__ = Household Private Retirement Income
Algorithm	I11101$$ = I11103$$ + I11104$$ + I11106$$ + I11117$$

Variable Name I11102$$

Variable Label Household Post-Government Income

Unit of Observation Household

Period Annual

Description This variable represents the combined income after taxes and government transfers (net) in the previous year of all individuals in the household.

Method This variable is the sum of total family income from labor earnings, asset flows, private retirement income, private transfers, public transfers, and social security pensions minus total family taxes. Labor earnings include wages and salary from all employment including training, self-employment income, bonuses, overtime, and profit-sharing. Asset flows include income from interest, dividends, and rent. Private transfers include payments from individuals outside of the household including alimony and child support payments. Public transfers include housing allowances, child benefits, subsistence assistance from the Social Welfare Authority, special circumstances benefits from the Social Welfare Authority, government student assistance, maternity benefits, unemployment benefits, unemployment assistance, and unemployment subsistence allowance. Social security pensions include payments from old age, disability, and widowhood pension schemes. The tax burdens provided here are based upon updated and modified tax calculation routines developed by Schwarze. The tax burden includes income taxes and payroll taxes (health, unemployment, retirement insurance and nursing home insurance taxes). These routines are described in Schwarze (1995).

Household post-government income has no negative values.

Format The value of this variable ranges from 0 to 9,999,999.
This variable is in current year EURO.

This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions:

I11103__ = Household Labor Earnings
I11104__ = Household Asset Income
I11106__ = Household Private Transfers
I11107__ = Household Public Transfers
I11108__ = Household Social Security Pensions
I11109__ = Total Household Taxes
I11117__ = Household Private Retirement Income

Algorithm I11102$$ = I11103$$ + I11104$$ + I11106$$ + I11107$$ + I11108$$ + I11117$$ - I11109$$

Variable Name	I11103$$
Variable Label	Household Labor Income
Unit of Observation	Household
Period	Annual
Description	This variable represents the combined gross labor income in the previous year of all individuals in the household 16 years of age and older.
Method	Labor earnings include wages and salary from all employment including training, primary and secondary jobs, and self-employment, plus income from bonuses, over-time, and profit-sharing. Specifically labor earnings is the sum of income from primary job, secondary job, self-employment, service pay, 13th month pay, 14th month pay, Christmas bonus pay, holiday bonus pay, miscellaneous bonus pay, and profit-sharing income. Since 1991 indemnity payments and commuting expenses or travel grants are also considered.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. This algorithm omits individuals with survey non-responses. Equivalent Data File Variable Definitions: I11110__ = Individual Labor Earnings
Algorithm	I11103$$ = sum of I11110$$ over all individuals in the household

Variable Name I11104$$

Variable Label Household Asset Income

Unit of Observation Household

Period Annual

Description This variable represents the gross household asset income in the previous year reported by the head of the household.

Method Asset flows include income from interest, dividends, and rent.

After 1984 respondents who could not estimate their interest and dividend income directly were asked to select a range from a set of categories. Their choices were:

under 500 DM
500 to 2,000 DM
2,000 to 5,000 DM
5,000 to 10,000 DM
10,000 DM and over

Starting in year 2001 (wave R) an additional item was offered:

10,000 to 20,000 DM
20,000 DM and over

Since year 2002 (wave S) all items are asked for Euro:

under 250 Euro
250 to 1,000 Euro
1,000 to 2,500 Euro
2,500 to 5,000 Euro
5,000 to 10,000 Euro
10,000 Euro and over

These respondents are assigned an interest and dividend amount based on uniformly distributed random numbers within their income range.

Rental income is the amount of income from rent minus any operation and maintenance costs. Negative rental incomes that result from operating costs in excess of income from rental and leasing are not considered here but set to zero.

In 1991 income from rent and operation and maintenance costs were not asked. If the respondent was interviewed in 1990, 1991, and 1992 and reported having rental income or operation and maintenance costs for 1990 and 1992, the average of the 1990 and 1992 values are assigned to 1991. If the respondent was interviewed in only two of the years, one of the years being 1991, and reported having rental income or operation and maintenance costs, then rental income or operation and maintenance costs for that year are assigned to 1991.

Format The value of this variable ranges from 0 to 9,999,999.
This variable is in current year EURO.

The survey variables provided below are part of the $PEQUIV-file.
This algorithm omits individuals with survey non-responses.

Algorithm I11104$$ = (RENTY$$ - OPERY$$) + DIVDY$$

Variable Name	I11105$$
Variable Label	Household Imputed Rental Value
Unit of Observation	Household
Period	Annual
Description	This variable represents the imputed rental value in the previous year of owner occu pied housing and for renters with below markets rent.
Method	The Imputed Rent (IR) information calculated for the German SOEP data is based on the so called Opportunity Cost Approach. This approach at the micro level yields information equivalent to that given by the Market Value Approach used in National account statistics for determining IR. After generating a fictitious market rent for owner-occupiers, all owner related costs are deducted including operating and maintenance costs, interest payments on mortgages, as well as property taxes (see Yates 1994 / United Nations 1977). In more detail, the implementation of the opportunity cost approach is used here in the following way. Along the lines of Oaxaca (1973), we estimate an OLS (semilog) regression model of gross rent in terms of square meters (not including heating) actually paid by main tenants in privately financed housing (without social housing and households with reduced rent). Independent variables include indicators describing the condition of the house, the year of construction, size of dwelling, length of occupancy, community size and disposable income. Applying these regression coefficients to the population of owner occupiers and individuals living in households with reduced rent such as employer provided flats, social housing or rent-free households. The resulting estimate represents a gross value at market prices (without costs for heating and warm water). For owner-occupiers owner-specific costs for taxation, maintenance and operating costs as well as interest on mortgages were deducted yielding a net value which can be interpreted as the appropriate income advantage of owner-occupied housing. For rent-free households and persons living in households with below market rents no further deductions have to be made. Information on interest and mortgage payments for the previous year from homeowners in SOEP serves as the basis for determining the level of interest payments. We assume an annuity with constant payments based on 7% annual interest and a 1% principal over the course of an average period of 30 years. In addition, we assume that mortgage payments begin at the same time in which the household moves into its new home. Thus, in the beginning of the repayment period interest payments clearly exceed the mortgage repayment. As times goes by, the share of the mortgage paid off increases, leaving an increasing income advantage from IR. For example an average interest burden of 3.29 DM/m^2 per month is used for West Germany in 1988 and rises to 5.52 DM/m^2 per month in 1998. The average interest burden in East Germany was slightly lower, at 4.14 DM/m^2 per month in 1998. In case of owner related costs exceeding the income advantage (especially at the beginning of the mortgage repayment period), IR is assigned a value of zero. For further details see: Frick and Grabka (2001) and Frick and Grabka (2003):
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.
Algorithm	N/a

Variable Name	I11106$$
Variable Label	Household Private Transfers
Unit of Observation	Household
Period	Annual
Description	This variable represents the combined private transfers in the previous year of all individuals in the household 16 years of age and older.
Method	Private transfers consists of income received from persons outside of the interviewed household. Starting in wave R an additional question identifies alimony separately (variable $p2o03 in SOEP file $PKAL: $ = R, S, …) and since 2010 advance child maintenance payment (IACHM$$) is asked separately. The bulk of transfer is likely to consist of alimony and child support payments.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. The survey variables provided below are part of the $PEQUIV-file. This algorithm omits individuals with survey non-responses.
Algorithm	I11106$$ = sum of (IALM$$ + IACHM$$ + ICHSU$$ + ISPOU$$ + IELSE$$) over all individuals in the household

Variable Name I11107$$

Variable Label Household Public Transfers

Unit of Observation Household

Period Annual

Description This variable represents the combined public transfers in the previous year of all individuals in the household 16 years of age and older.

Method Public Transfers are the sum of individual public transfers -- student grants, maternity benefits, unemployment benefits, unemployment assistance, subsistence allowance and transition pay -- over all individuals in the household, plus household benefits -- housing allowances, child benefits, nursing care insurance, direct housing subsidy, subsistence assistance, support for special circumstances, social assistance for elderly unemployment benefit II and sickness benefit.

In 1984 the amount of child benefits is not asked. Child benefits for this year were imputed using information on the number of children in the household and the number of months the benefits were received.

In 1992 through 1994 the amounts of subsistence assistance and special circumstances benefits are not asked. These values have been filled in with imputed values for total social welfare income. In 1995 through 2000 amounts of subsistence assistance and special circumstances benefits are imputed using an algorithm developed by Peter Krause (DIW) based on the benefits received in the present survey month.

Since 1996 nursing care insurance benefits are included in the sum. In 1996 German law established direct housing subsidy payments. Starting in the 2000 survey a separate question was asked about income from this source. Direct housing subsidy payments for respondents who bought homes between 1996 and 1999 were imputed using information about the year of construction, acquisition of ownership and number of children in the household. In 2005 social assistance for elderly was asked the first time. In 2006 unemployment benefit II was asked the first time and replaced unemployment assistance. Since 2009 additional child benefit was asked the first time. For survey year 2010 HH-public transfers does also include 2500 Euro car scrappage scheme for households which acquired a new car in the previous year. Since 2014 child care subsidy was asked the first time in SOEP. In 2017 benefits from the educational package and asylum seekers benefits were also included. In 2020 benefits from "Baukindergeld" Building subsidy for new property owners were also included. In 2021 sickness benefits were asked for the first time.

Format The value of this variable ranges from 0 to 9,999,999.
This variable is in current year EURO.

The survey variables provided below are part of the $PEQUIV-file.
This algorithm omits individuals with survey non-responses.

Algorithm I11107$$ = [sum of (IUNBY$$ + IUNAY$$ + ISUBY$$ + IERET$$ + IMATY$$ + ISTUY$$) over all individuals in the household] + HOUSE$$ + CHSPT$$ + NURSH$$ + SUBST$$ + SPHLP$$ + HSUP$$ + SSOLD$$+ ALG2$$ + ADCHB$$ +CHSUB$$ + EDUPAC$$ + ASYL$$ + BAUK$$ + ISICK$$

2010: I11107$$ = I11107$$ + 2500 if bah7101c=1

Variable Name	I11108$$
Variable Label	Household Social Security Pensions
Unit of Observation	Household
Period	Annual
Description	This variable represents the combined gross social security pensions in the previous year of all individuals in the household 16 years of age and older.
Method	Social security pensions are the sum of old-age, disability, and widowhood social security pensions. This include payments of the German Pension Insurance (GRV), Miner's social Insurance (Knappschaft), Civil Servant Pension (Beamtenpension), War Victim Benefits (Kriegsopferversorgung), Farmer's Benefits and accident pension (GUV), pensions from abroad and pension for liberal professions (berufsständische Versorgungswerke). In 1993 through 1994 pension income from East German pensions ($p7902o and $p7912o) is assigned to other pension income. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. The survey variables provided below are part of the $PEQUIV-file. This algorithm omits individuals with survey non-responses.
Algorithm	
1984-1985:	I11108$$ = sum of (IOLDY$$ + IWIDY$$ + ICOMP$$ + IPRVP$$) over all individuals in the household
2002:	I11108$$ = sum of (IOLDY$$ + IWIDY$$) over all individuals in the household
1986-2001, 2003-2015:	I11108$$ = sum of (igrv1$$ + igrv2$$ + ismp1$$ + ismp2$$ + iciv1$$ + iciv2$$ + iwar1$$ + iwar2$$ + iagr1$$ + iagr2$$ + iguv1$$ + iguv2$$) over all individuals in the household ($$=86-01,03,…,15)
since 2016	I11108$$ = sum of (igrv1$$ + igrv2$$ + ismp1$$ + ismp2$$ + iciv1$$ + iciv2$$ + iwar1$$ + iwar2$$ + iagr1$$ + iagr2$$ + iguv1$$ + iguv2$$ + iaus1$$ + iaus2$$ + ilib1$$ + ilib2$$) over all individuals in the household ($$=16,…)

Variable Name	I11109$$
Variable Label	Total Household Taxes
Unit of Observation	Household
Period	Annual
Description	This variable includes income taxes and payroll taxes (e.g. health, unemployment, nursing home and retirement insurance taxes) in the previous year of all individuals in the household 16 years of age and older.
Method	The tax estimates come from Schwarze (1995), the taxes are assigned on a household basis. The estimated tax burdens include income taxes and payroll taxes (health, unemployment, care and retirement insurance taxes). These routines are described in Schwarze (1995). Since 1995 the solidarity surplus tax is also considered in the tax estimates. No algorithms are provided for the tax estimates.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. The survey variables provided below are part of the $PEQUIV-file.
Algorithm	I11109$$ = I11111$$ + I11112$$

Variable Name	I11110$$
Variable Label	Individual Labor Earnings
Unit of Observation	Individual
Period	Annual
Description	This variable represents the gross labor earnings in the previous year of individuals in the household 16 years of age and older.
Method	Labor earnings include wages and salary from all employment including training, primary and secondary jobs, and self-employment, plus income from bonuses, overtime, and profit-sharing. Specifically labor earnings is the sum of income from primary job, secondary job, self-employment, 13th month pay, 14th month pay, Christmas bonus pay, holiday bonus pay, miscellaneous bonus pay, and profit-sharing income. Since 1991 indemnity payments, since 1996 military service payments and since 2006 commuting expenses or travel grants are also considered. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. The survey variables provided below are part of the $PEQUIV-file. This algorithm omits individuals with survey non-responses.
Algorithm	
1984-2015	I11110$$ = IJOB1$$ + IJOB2$$ + ISELF$$ + IMILT$$ + I13LY$$ + I14LY$$ + IXMAS$$ + IHOLY$$ + IGRAY$$ + IOTHY$$ + IDEMY$$ + ITRAY$$
Since 2016	I11110$$ = IJOB1$$ + IJOB2$$ + ISELF$$ + IMILT$$ + I13LY$$ + I14LY$$ + IXMAS$$ + IHOLY$$ + IGRAY$$ + IOTHY$$ + IDEMY$$ + ITRAY$$ + IWITH$$

Variable Name	I11111$$
Variable Label	Household Federal Taxes
Unit of Observation	Household
Period	Annual
Description	This variable includes federal income taxes in the previous year of all individuals in the household 16 years of age and older.
Method	The tax estimates come from Schwarze (1995). Taxes are estimated for each tax unit within the household and then summed over all tax units within the household to arrive at a total household tax burden. The estimated tax burdens include federal income taxes and solidarity surplus tax. These routines are described in Schwarze (1995). No algorithms are provided for the tax estimates.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.
Algorithm	N/a

Variable Name	I11112$$
Variable Label	Household Social Security Taxes
Unit of Observation	Household
Period	Annual
Description	This variable includes social security taxes (payroll taxes) in the previous year of all individuals in the household 16 years of age and older.
Method	The tax estimates come from Schwarze (1995). Taxes are estimated for each tax unit within the household and then summed over all tax units within the household to arrive at a total household tax burden. The estimated tax burdens include social security taxes (e.g. health, unemployment, nursing home and retirement insurance taxes). These routines are described in Schwarze (1995). No algorithms are provided for the tax estimates.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.
Algorithm	N/a

Variable Name	I11113$$	Household Post-Government Income (TAXSIM)
	I11114$$	Total Household Taxes (TAXSIM)
	I11115$$	Household State Taxes (TAXSIM)
	I11116$$	Household Federal Taxes (TAXSIM)

Unit of Observation Household

Description This variable represents the combined income after taxes and government transfers, the Total Household Taxes, the Household State Taxes and the Household Federal Taxes of all individuals in the household 16 years of age and older.

Method Income taxes and state taxes were not estimated for the SOEP using the National Bureau of Economic Research (NBER) TAXSIM Model. This variable is not available in the SOEP.

Format N/A

Algorithm N/a

Variable Name	I11117$$
Variable Label	Household Private Retirement Income
Unit of Observation	Household
Period	Annual
Description	This variable represents the combined gross retirement income in the previous year from private sources of all individuals in the household 16 years of age and older.
Method	Private pension income is the sum of supplementary civil servant pension income, company pensions, private pensions and pension income from "other" sources. See the algorithm for I11108$$.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. The survey variables provided below are part of the $PEQUIV-file. This algorithm omits individuals with survey non-responses. Note also that this information is not available in 1984 and 1985.
Algorithm	
1984-1985:	N/a
2002-2003:	I11117$$ = sum of (ICOMP$$ + IPRVP$$) over all individuals in the household ($$= 02-03)
1986-2001, 2004-2014:	I11117$$ = sum of (ivbl1$$ + ivbl2$$ + icom1$$ + icom2$$ + iprv1$$ + iprv2$$ + ison1$$ + ison2$$) over all individuals in the household ($$= 86-01, 04,-14)
2015-2016:	I11117$$ = sum of (ivbl1$$ + ivbl2$$ + icom1$$ + icom2$$ + iprv1$$ + iprv2$$ + ison1$$ + ison2$$ + irie1$$ + irie2$$) over all individuals in the household ($$= 15,…)
2017-:	I11117$$ = sum of (ivbl1$$ + ivbl2$$ + icom1$$ + icom2$$ + iprv1$$ + iprv2$$ + ison1$$ + ison2$$ + irie1$$ + irie2$$) over all individuals in the household

Variable Name	I11118$$
Variable Label	Household Windfall Income
Unit of Observation	Household
Period	Annual
Description	This variable represents the amount of total gross household windfall income in the previous year of all individuals in the household 16 years of age and older.
Method	Windfall income consists of one-time transfers, winnings, inheritance and gifts of money or items worth more than 5000 DM (wave Q-R), 2500 Euro (wave S-U) or 500 Euro (since wave V). It was asked the first time in wave Q (variable qh4505 in SOEP file QH). In 2016 the question has been split up into 3, inheritances, bequest and lottery winnings.
Format	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO. This algorithm omits individuals with survey non-responses. The original survey variables provided below can be found in the file _H.
Algorithm	I11118$$ = Ywind
1984-1999	n.a.
2000-2015	Windfall income variable list by survey year - each entry denoted in algorithm as Ywind: QH4505 RH4505 SH4505 TH44 UH44 VH47 WH47 XH47 YH48 ZH48 BAH48 BBH48 BCH48 BDH48 BEH51 BFH47 BGH57
2016	Wwind= BGH57 + BGH59 + BGH61
2017-2019/2022	Wwind= $H_50 + $H_52 + $H_54 ($=BH, BI, BJ, BM)
2020	Wwind= BKH_63 + BKH_65 + BKH_67
2021	Wwind= BLH_49 + BLH_51 + BLH_53
2023	Wwind= BNH_56 + BNH_58 + BNH_60

Variable Name	I11201$$	Share of imputed Household Pre-Government Income
	I11202$$	Share of imputed Household Post-Government Income
	I11203$$	Share of imputed Household Labor Income
	I11204$$	Share of imputed Household Asset Income
	I11206$$	Share of imputed Household Private Transfers
	I11207$$	Share of imputed Household Public Transfers
	I11208$$	Share of imputed Household Social Security Pensions
	I11217$$	Share of imputed Household Private Retirement Income

Unit of Observation Household

Description This variable indicates the percentage share of income that has been imputed for the respective income type. The predominant imputation technique used to fill in missing values is based on the row and column imputation procedure developed by Little and Su (1989). In the case of lacking longitudinal data purely cross-sectional imputation techniques are applied. For further details, see: Grabka and Frick (2003).

Method In the original SOEP data there are three types of missing values. These missing values can be interpreted as:

-1 = no answer or do not know
-2 = does not apply
-3 = original value was deleted because it was found to be implausible

The imputation procedures was used to fill in missing values represented by -1 and -3 only.

Format 0 = Not Imputed
1 = Fully Imputed

This algorithm omits individuals with survey non-responses.

Algorithm
I11201$$= percentage share of income that has been imputed for I11101$$
I11202$$= percentage share of income that has been imputed for I11102$$
I11203$$= percentage share of income that has been imputed for I11103$$
I11204$$= percentage share of income that has been imputed for I11104$$
I11206$$= percentage share of income that has been imputed for I11106$$
I11207$$= percentage share of income that has been imputed for I11107$$
I11208$$= percentage share of income that has been imputed for I11108$$
I11217$$= percentage share of income that has been imputed for I11117$$

Variable Name	I11205$$	Impute Household Imputed Rental Value
	I11209$$	Impute Total Household Taxes
Unit of Observation	Household	
Description	This variable indicates if the respective income has been imputed.	
Method	Household imputed rental value and total household taxes are fully simulated in the SOEP. Thus, this variable indicates if the respective income has been simulated and takes a value of 0 otherwise.	
Format	0 = Not Imputed 1 = Fully Imputed This algorithm omits individuals with survey non-responses.	
Algorithm	I11205$$= 1 if I11105$$ > 0, else I11205$$ = 0. I11209$$= 1 if I11109$$ > 0, else I11209$$ = 0.	

Variable Name	I11210$$
Variable Label	Share of imputed Individual Labor Earnings
Unit of Observation	Individual
Description	This variable indicates the percentage share of income that has been imputed for individual labor earnings (I11110$$). The predominant imputation technique used to fill in missing values is based on the row and column imputation procedure developed by Little and Su (1989). In the case of lacking longitudinal data purely cross-sectional imputation techniques are applied. For further details, see: Grabka and Frick (2003).
Method	In the original SOEP data there are three types of missing values. These missing values can be interpreted as: -1 = no answer or do not know -2 = does not apply -3 = original value was deleted because it was found to be implausible The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.
Format	0 = Not Imputed 1 = Fully Imputed This algorithm omits individuals with survey non-responses.
Algorithm	I11210$$= percentage share of income that has been imputed for I11110$$

Variable Name	I11218$$
Variable Label	Impute Household Windfall Income
Unit of Observation	Household
Description	This variable indicates if windfall income (I11118$$) has been imputed. Item non response on windfall income has been imputed using the sample median in the respective observation years. For further details, see: Grabka and Frick (2003)
Method	In the original SOEP data there are three types of missing values. These missing values can be interpreted as: -1 or .A = no answer or do not know -2 or .B = does not apply -3 or .C = original value was deleted because it was found to be implausible The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.
Format	0 = Not Imputed 1 = Fully Imputed This algorithm omits individuals with survey non-responses.
Algorithm	N/a

Variable Name RENTY$$

Variable Label Income from rental and leasing

Unit of Observation Household

Period Annual

Description This variable represents the gross household income from rental and leasing in the last year.

In 1991 income from rent were not asked. If the respondent was interviewed in 1990, 1991, and 1992 and reported having rental income for 1990 and 1992, the average of the 1990 and 1992 values are assigned to 1991. If the respondent was interviewed in only two of the years, one of the years being 1991, and reported having rental income, then rental income for that year are assigned to 1991.

Method Transcribed variable.

Format The value of this variable ranges from 0 to 9,999,999.

This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array cm101{*} ah41 bh35 ch47 dh47 eh38 fh38 gh38 hhrenty ih41 jh41 kh41 lh41 mh41 nh41
                oh41 ph41 qh41 rh41 sh41 th39 uh39 vh38 wh38 xh38 yh39 zh39 bah39
                bbh39 bch39 bdh39 beh42 bfh38 bgh46 bhh_39 bih_39 bjh_40 bkh_52 blp_39
                bmh_39 bnh_46
*** imputed values due to item-non response ***
array cm102{*} xah41 xbh35 xch47 xdh47 xeh38 xfh38 xgh38 out xih41 xjh41 xkh41 xlh41
               mh41 xnh41 xoh41 xph41 xqh41 xrh41 xsh41 xth39 xuh39 xvh38 xwh38
               xxh38 xyh39 xzh39 xbah39 xbbh39 xbch39 xbdh39 xbeh42 xbfh38 xbgh46
              xbhh_39 xbih_39 xbjh_40 xbkh_52 xblp_39 xbmh_39 xbnh_46
array cm103{*} temp1$$;
array cm104{*} renty$$;

do i = 1 to dim(netto);
 cm103{i}=.;
 if netto{i} >= 10 & < 20 then do;
  if cm102{i} lt 0 then cm102{i} = 0;
  if cm101{i} eq .A or cm101{i} eq .C then cm103{i}=cm102{i};
  else if cm101{i} eq .B then cm103{i}=0;
  else cm103{i}=cm101{i};
  cm104{i}=cm103{i};
 end;
 else cm104{i}=-2;
end;
```

Variable Name OPERY$$

Variable Label Operation, maintenance costs

Unit of Observation Household

Period Annual

Description This variable represents the household operation and maintenance costs in the last year.

In 1991 operation and maintenance costs were not asked. If the respondent was interviewed in 1990, 1991, and 1992 and reported having operation and maintenance costs for 1990 and 1992, the average of the 1990 and 1992 values are assigned to 1991. If the respondent was interviewed in only two of the years, one of the years being 1991, and reported having operation and maintenance costs, then operation and maintenance costs for that year are assigned to 1991.

Method Transcribed variable.

Format The value of this variable ranges from 0 to 9,999,999.

This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array ct101{*} ah4201 bh3601 ch4801 dh4801 eh3901 fh3901 gh3901 hhopery ih4201 jh4201
                kh4201 lh4201 mh4201 nh4201 oh4201 ph4201 qh4201 rh4201 sh4201 th4001
                uh4001 vh3901 wh3901 xh3901 yh4001 zh4001 bah4001 bbh4001 bch4001
                bdh4001 beh4301 bfh3901 bgh48 bhh_41 bih_41 bjh_42 bkh_54 blp_41
                bmh_41 bnh_48
*** imputed values due to item-non response ***
array ct102{*} xah4201 xbh3601 xch4801 xdh4801 xeh3901 xfh3901 xgh3901 out xih4201
               xjh4201 xkh4201 xlh4201 xmh4201 xnh4201 xoh4201 xph4201 xqh4201
                xrh4201 xsh4201 xth4001 xuh4001 xvh3901 xwh3901 xxh3901 xyh4001
                xzh4001 x bah4001 xbbh4001 xbch4001 xbdh4001 xbeh4301 xbfh3901 xbgh48
                xbhh_41 xbih_41 xbjh_42 xbkh_54 xblp_41 xbmh_41 xbnh_48
array ct103{*} temp$$
array ct104{*} opery$$;

do i = 1 to dim(netto);
 ct103{i}=.;
 if netto{i} >= 10 & < 20) then do;
  if ct102{i} lt 0 then ct102{i}=0;
  if ct101{i} eq .A or ct101{i} eq .C then ct103{i}=ct102{i};
  else if ct101{i} eq .B then ct103{i}=0;
  else ct103{i}=ct101{i};
  ct104{i}=ct103{i};
 end;
 else ct104{i}=.S;
end;
```

Variable Name DIVDY$$

Variable Label Interest, dividend income

Unit of Observation Household

Period Annual

Description This variable represents the gross household income from interest and dividends in the last year.

Method After 1984 respondents who could not estimate their interest and dividend income directly were asked to select a range from a set of categories. Their choices were:

under 500 DM
500 to 2,000 DM
2,000 to 5,000 DM
5,000 to 10,000 DM
10,000 DM and over

Starting in year 2001 (wave R) an additional item was offered:

10,000 to 20,000 DM
20,000 DM and over

Since year 2002 (wave S) all items are asked for Euro:

under 250 Euro
250 to 1,000 Euro
1,000 to 2,500 Euro
2,500 to 5,000 Euro
5,000 to 10,000 Euro
10,000 Euro and over

These respondents are assigned an interest and dividend amount based on uniformly distributed random numbers within their income range.

Format The value of this variable ranges from 0 to 9,999,999.
This variable is in current year EURO.
The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array cx101{*} ah45 bh3801 ch5001 dh5001 eh4101 fh4101 gh4101 hh4701 ih4401 jh4401
                kh4401 lh4401 mh4401 nh4401 oh4401 ph4401 qh4401 rh4401 sh4401 th4201
                uh4201 vh4501 wh4501 xh4501 yh4601 zh4601 bah4601 bbh4601 bch4601
                bdh4601 beh4901 bfh4501 bgh6401 bhh_57_01 bih_57_01 bjh_57_01
                bkh_70_01 blh_56_01 bmh_57_01 bnh_63_01
                        *** imputed values due to item-non response ***
array cx102{*} xah45 xbh3801 xch5001 xdh5001 xeh4101 xfh4101 xgh4101 xhh4701 xih4401
               xjh4401 xkh4401 xlh4401 xmh4401 xnh4401 xoh4401 xph4401 xqh4401
                xrh4401 xsh4401 xth4201 xuh4201 xvh4501 xwh4501 xxh4501 xyh4601;
                xzh4601 xbah4601 xbbh4601 xbch4601 xbdh4601 xbeh4901 xbfh4501
                xbgh6401 x bhh_57_01 xbih_57_01 xbjh_57_01 xbkh_70_01 xblh_56_01
                xbmh_57_01 xbnh_63_01
array cx103{*} temp$$;
array cx104{*} divdy$$;

if ah45=.B then ah45=0;
do i = 1 to dim(netto);
cx103{i}=.;
if netto{i} >= 10 & < 20) then do;
  if cx101{i} eq .A or cx101{i} eq .C then cx103{i}=cx102{i};
  else cx103{i}=cx101{i}; cx104{i}=cx103{i}; end;
 else cx104{i}=-2;
end;
```

Variable Name CHSPT$$

Variable Label Child allowance

Unit of Observation Household

Period Annual

Description This variable represents the household income from child allowances in the last year.

Method In 1984 questions related to this topic were not asked. Child benefits for this year were imputed using information on the number of children in the household and the number of months the benefits were received.
In 1985 to 2000 there was no information regarding the number of months the children allowance was claimed. In all those cases 12 months of claim was supposed.
Since 2001 child allowances is the product of the number of months the children allowance was claimed in the previous year and the average amount per month.
In 2020, a one-time supplement of around €300 per child was granted, in 2021 €150 per child (Kinderbonus).

Format The value of this variable ranges from 0 to 999.999.
This variable is in current year EURO.
The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array dp101{*} out  bh3303 ch4503 dh4503 eh3603 fh3603 gh3603 hh4503 ih4603 jh4603
                    kh4603 lh4603 mh4603 nh4603 oh4603 ph4603 qh50 rh4603 sh4603 th4503
                    uh4503 vh4803 wh4803 xh4803 yh4903 zh4903 bah4903 bbh4903 bch4903
                    bdh4903 beh5203 bfh4803 bgh6603 bhh_59_03 bih_59_03 bjh_59_03
                    bkh_72_03 blh_58ab_02 bmh_59_03 bnh_65ab_02
*** imputed values due to item-non response ***
array dp102{*} out xbh3303 xch4503 xdh4503 xeh3603 xfh3603 xgh3603 xhh4503 xih4603
                    xjh4603 xkh4603 xlh4603 xmh4603 xnh4603 xoh4603 xph4603 xqh50
                    xrh4603 xsh4603 xth4503 xuh4503 xvh4803 xwh4803 xxh4803 xyh4903
                    xzh4903 xbah4903 xbbh4903 x bch4903 xbdh4903 xbeh5203 xbfh4803
                    xbgh6603 xbhh_59_03 xbih_59_03 xbjh_59_03 xbkh_72_03 x blh_58ab_02
                    xbmh_59_03 xbnh_65ab_02
array dp103{*} kg84 out out out out out out out out out out out out out out out out out out
                    out out out out out out out out out out out out out
array dp104{*} temp$$;
array dp106{*} out out out out out out out out out out out out out out  out out out rh4602
                    sh4602 th4502 uh4502 vh4802 wh4802 xh4802 yh4902 zh4902 bah4902
                    bbh4902 bch4902 bdh4902 beh5202 bfh4802 bgh6602 bhh_60_02 bih_60_02
                    bjh_60_02 bkh_72_02 blh_58ab_01 bmh_59_02 bnh_65ab_01
array dp105{*} chspt$$;

do i = 1 to dim(netto);
 dp104{i}=.;
 if netto{i} >= 10 & < 20) then do;
  if dp102{i} lt 0 then dp102{i} = 0;
  if dp103{i} lt 0 then dp103{i} = 0;
  if dp106{i} = .A or dp106{i} = .C then dp106{i}=12;
  if dp106{i} in (.B,.)            then dp106{i}=0;

  if dp101{i} = .A or dp101{i} = .C then dp104{i}=dp102{i};
  else if dp101{i} in (.B,.)       then dp104{i}=0;
  else                             dp104{i}=dp101{i};

      if i=1                then dp105{i}=dp103{i};         * wave A   *;
  else if (i ge 2 and i le 17) then dp105{i}=dp104{i}*12;      * wave B-Q *;
  else if (i ge 18)            then dp105{i}=dp104{i}*dp106{i}; * wave R ..*;
 end;
 else dp105{i}=-2; end;
```

Variable Name HOUSE$$

Variable Label Housing allowance

Unit of Observation Household

Period Annual

Description This variable represents the household income from housing allowance in the last year.

Method Housing allowance is the product of the number of months that benefit was claimed in the previous year and the average amount per month.

Format The value of this variable ranges from 0 to 9,999,999.
This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array dl101{*} ah29 bh2802 ch4002 dh4002 eh3102 fh3102 gh3102 hh4002 ih4502 jh4502
                kh4502 lh4502 mh4502 nh4502 oh4502 ph4502 qh47 rh4605 sh4605 th4505
                uh4505 vh4805 wh4808 xh4808 yh4908 zh4911 bah4920 bbh4920 bch4920
                bdh4920 beh5223 bfh4838 bgh6623 bhh_59_23 bih_59_23 bjh_59_23
                bkh_72_23 blh_58hb_01 bmh_59_23 bnh_65hb_01
array dl102{*} ah30 bh2803 ch4003 dh4003 eh3103 fh3103 gh3103 hh4003 ih4503 jh4503
               kh4503 lh4503 mh4503 nh4503 oh4503 ph4503 qh48 rh4606 sh4606 th4506
               uh4506 vh4806 wh4809 xh4809 yh4909 zh4912 bah4921 bbh4921 bch4921
               bdh4921 beh5224 bfh4839 bgh6624 bhh_59_24 bih_59_24 bjh_59_24
               bkh_72_24 blh_58hb_02 bmh_59_24 bnh_65hb_02
*** imputed values due to item-non response ***
array dl103{*} xah30 xbh2803 xch4003 xdh4003 xeh3103 xfh3103 xgh3103 xhh4003 xih4503
               xjh4503 xkh4503 xlh4503 xmh4503 xnh4503 xoh4503 xph4503 xqh48 rh4606
               xsh4606 xth4506 xuh4506 xvh4806 xwh4809 xxh4809 xyh4909 xzh4912
               xbah4921 xbbh4921 xbch4921 xbdh4920 xbeh5223 xbfh4839 xbgh6624
               xbhh_59_24 xbih_59_24 xbjh_59_24 xbkh_72_24 xblh_58hb_02 xbmh_59_24
               xbnh_65hb_02
array dl104{*} temp$$4
array dl105{*} temp$$;
array dl106{*} house$$;

do i = 1 to dim(netto);
 dl104{i}=.;
 dl105{i}=.;
 if dl103{i} lt 0 then dl103{i} = 0;
 if dl101{i} = .A or dl101{i} = .C then dl101{i} = 10;
 if netto{i} >= 10 & < 20 then do;
  if dl101{i} eq .B then dl104{i}=0;
  else dl104{i}=dl101{i};
  if dl102{i} eq .A or dl102{i} eq .C then do;
   if dl101{i} le 0 and dl103{i} gt 0 then dl104{i}=12;
   dl105{i}=dl103{i};
  end;
  else if dl102{i} eq .B then dl105{i}=0;
  else dl105{i}=dl102{i};
  dl106{i}=dl104{i}*dl105{i};
 end;
 else dl106{i}=-2;
end;
```

Variable Name	NURSH$$
Variable Label	Nursing allowances
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from nursing allowances. Nursing allowances was introduced in the German welfare system in 1996. In 1996-2000 questions related to this topic were only asked for the month of the interview but not for the previous year. Nursing allowances for the previous year was imputed using this information. Since 2001 both the numbers of that benefit was claimed in the previous year and the average amount per month were asked.
Method	Nursing allowances is the product of the number of months that benefit was claimed in the previous year and the average amount per month.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2000 : N/a since 2001:

```
array dzc101{*} rh4609 sh4609 th4509 uh4509 vh4809 wh4812 xh4812 yh4912 zh4915
                bah4912 bbh4912 bch4912 bdh4912 beh5215 bfh4824 bgh6615 bhh_59_15
                bih_59_15 bjh_59_15 bkh_72_15 blh_58eb_02 bmh_59_15 bnh_65eb_02
*** imputed values due to item-non response ***
array dzc102{*} xrh4609 xsh4609 xth4509 xuh4509 xvh4809 xwh4812 xxh4812 xyh4912
                xzh4915 xbah4912 xbbh4912 xbch4912 xbdh4912 xbeh5215 xxbfh4815
                xbgh6615 xbhh_59_15 xbih_59_15 xbjh_59_15 xbkh_72_15 xblh_58eb_02
                xbmh_59_15 xbnh_65eb_02
array dzc103{*} rh4608 sh4608 th4508 uh4508 vh4808 wh4811 xh4811 yh4911 zh4914
                bah4911 bbh4911 bch4911 bdh4911 beh5214 bfh4823 bgh6614 xbhh_59_14
                bih_59_14 bjh_59_14 bkh_72_14 blh_58eb_01 bmh_59_14 bnh_65eb_01
array dzc104{*} nursh$$;
do i = 1 to dim(dzc101);
 if dzc103{i} eq .A or dzc103{i} = .C then dzc103{i} = 10;
 if dzc101{i} eq .A or dzc101{i} eq .C then do;
  if dzc102{i} gt 0 and dzc103{i} gt 0 then dzc104{i}=dzc102{i}*dzc103{i};
 end;
 else if dzc101{i} eq .B then do;
  dzc104{i}=0;
 end;
 else do;
  dzc104{i}=dzc101{i}*dzc103{i};
 end;
end;
```

Variable Name SUBST$$

Variable Label Social assistance

Unit of Observation Household

Period Annual

Description This variable represents the household income from social assistance in the last year.

Method Social assistance is the product of the number of months that benefit was claimed in the previous year and the average amount per month. In 1992 through 1994 the amounts of subsistence assistance and special circumstances benefits were not asked. These values have been filled in with imputed values for total social welfare income. In 1995 through 2000 amounts of subsistence assistance and special circumstances benefits are imputed using an algorithm developed by Peter Krause (DIW) based on the benefits received in the present survey month. Since 2010 subsistence assistance and special circumstances benefits were asked in one single item. In 2021, an additional Corona bonus of €150 per adult was granted once.

Format The value of this variable ranges from 0 to 99.999.
This variable is in current year EURO.
The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array dt101{*} ah34 bh3002 ch4202 dh4202 eh3302 fh3302 gh3302 hh4202 out out out out out
                out out out out rh4702 sh4702 th4602 uh4602 vh4902 wh4902 xh4902 yh5002
                zh5002 bah4914 bbh4914 bch4914 bdh4914 beh5217 bfh4828 bgh6617
                bhh_59_17 bih_59_17 bjh_59_17 bkh_72_17 blh_58fb_01 bmh_59_17
                bnh_65fb_01
array dt102{*} ah35 bh3003 ch4203 dh4203 eh3303 fh3303 gh3303 hh4203 out out out out out
                out out out out rh4703 sh4703 th4603 uh4603 vh4903 wh4903 xh4903 yh5003
                zh5003 bah4915 bbh4915 bch4915 bdh4915 beh5218 bfh4829 bgh6618
                bhh_59_18 bih_59_18 bjh_59_18 bkh_72_18 blh_58fb_02 bmh_59_18
                bnh_65fb_02
*** imputed values due to item-non response ***
array dt103{*} xah35 xbh3003 xch4203 xdh4203 xeh3303 xfh3303 xgh3303 xhh4203 out out
                out out out out out out xrh4703 xsh4703 xth4603 xuh4603 xvh4903
                xwh4903 xxh4903 xyh5003 xzh5003 xbah4915 xbbh4915 bch4915 xbdh4914
                xbeh5217 xbfh4829 xbgh6618 xbhh_59_18 xbih_59_18 xbjh_59_18
                xbkh_72_18 xblh_58fb_02 xbmh_59_18 xbnh_65fb_02
*** imputed values due to lacking information in the questionnaire ***
array dt104{*} out out out out out out out out sozye92 sozye93 sozye94 socast95 socast96
                socast97 socast98 socast99 socast00 out out out out out out out out out out
                out out out out
array dt105{*} temp1$$
array dt106{*} temp2$$;
array dt107{*} subst$$;

do i = 1 to dim(netto);
 dt105{i}=.; dt106{i}=.;
 if netto{i} >= 10 & < 20 then do;
  if dt103{i} lt 0 then dt103{i}=0;
  if dt101{i} eq .B      then dt105{i}=0;
  if dt101{i} in (.A,.C) then dt105{i}=12;
  if dt101{i} ge 0       then dt105{i}=dt101{i};
  if dt102{i} eq .A or dt102{i} eq .C then do;
   if dt101{i} le 0 and dt103{i} gt 0 then dt105{i}=12; dt106{i}=dt103{i};  end;
  else if dt102{i} eq .B then dt106{i}=0;
  else dt106{i}=dt102{i};
    if i ge 9 and i le 17 then do;
     if dt104{i}=. then dt104{i}=0;    end;
  if i ge 9 and i le 17 then dt107{i}=dt104{i};
  else dt107{i}=dt105{i}*dt106{i};  end;
 else dt107{i}=-2; end;
```

Variable Name SPHLP$$

Variable Label Social assistance for special circumstances

Unit of Observation Household

Period Annual

Description This variable represents the household income from Social assistance for special circumstances in the last year.

Method Social assistance for special circumstances is the product of the number of months that benefit was claimed in the previous year and the average amount per month.
In 1992 through 2000 and since 2010 the amounts of special circumstances benefits were not asked.

Format The value of this variable ranges from 0 to 99.999.
This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array dx101{*} ah3601 bh3102 ch4302 dh4302 eh3402 fh3402 gh3402 hh4302 out out out out
                    out out out out out rh4705 sh4705 th4605 uh4605 vh4908 wh4908 xh4908
                     yh5008 zh5008 out out out out out out out out out
array dx102{*} ah37 bh3103 ch4303 dh4303 eh3403 fh3403 gh3403 hh4303 out out out out
                    out out out out out rh4706 sh4706 th4606 uh4606 vh4909 wh4909 xh4909
                     yh5009 zh5009 out out out out out out out out out
*** imputed values due to item-non response ***
array dx103{*} xah37 xbh3103 xch4303 xdh4303 xeh3403 xfh3403 xgh3403 xhh4303 out out
                    out out out out out out out xrh4706 xsh4706 xth4606 xuh4606 xvh4909
                    xwh4909 xxh4909 xyh5009 xzh5009 out out out out out out out out out
array dx104{*} temp1$$;
array dx105{*} temp2$$;
array dx106{*} sphlp$$;

do i = 1 to dim(netto);
 dx104{i}=.;
 dx105{i}=.;
 if netto{i} >= 10 & < 20 then do;
  if dx103{i} lt 0 then dx103{i}=0;
  if dx101{i} eq .B      then dx104{i}=0;
  if dx101{i} in (.A,.C) then dx104{i}=10;
  if dx101{i} ge 0       then dx104{i}=dx101{i};

  if dx102{i} eq .A or dx102{i} eq .C then do;
   if dx101{i} le 0 and dx103{i} gt 0 then dx104{i}=12;
   dx105{i}=dx103{i};
  end;
  else if dx102{i} eq .B then dx105{i}=0;
  else dx105{i}=dx102{i};
  dx106{i}=dx104{i}*dx105{i};
 end;
 else dx106{i}=-2;
end;
```

Variable Name SSOLD$$

Variable Label Social assistance for elderly (Grundsicherung im Alter)

Unit of Observation Household

Period Annual

Description This variable represents the household income from Social assistance for elderly in the last year.

Method Social assistance for elderly is the product of the number of months that benefit was claimed in the previous year and the average amount per month. It was asked the first time in wave V (variable vh4906 in SOEP file VH).
In 2021, an additional Corona bonus of €150 per adult was granted once.

Format The value of this variable ranges from 0 to 99.999.
This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array dy101{*} vh4905 wh4905 xh4905 yh5005 zh5005 bah4917 bbh4917 bch4917 bdh4917
                beh5220 bfh4833 bgh6620 bhh_59_20 bih_59_20 bjh_59_20 bkh_72_20
                blh_58gb_01 bmh_59_20 bnh_65gb_01
array dy102{*} vh4906 wh4906 xh4906 yh5006 zh5006 bah4918 bbh4918 bch4918 bdh4918
                beh5221 bfh4834 bgh6621 bhh_59_21 bih_59_21 bjh_59_21 bkh_72_21
                blh_58gb_02 bmh_59_21 bnh_65gb_02
array dy103{*} xvh4906 xwh4906 xxh4906 xyh5006 xzh5006 xbah4918 xbbh4918 xbch4918 x
                xbdh4918 xbeh5221 x bfh4834 xbgh6621 xbhh_59_21 xbih_59_21 xbjh_59_21
                xbkh_72_21 xblh_58gb_02 xbmh_59_20 xbnh_65gb_02
array dy104{*} temp1$$;
array dy105{*} temp2$$;
array dy106{*} ssold$$;

do i = 1 to dim(dy101);
 dy104{i}=.; dy105{i}=.;
 if aa100{i}=1 then do;
  if dy103{i} lt 0 then dy103{i}=0;
  if dy101{i} eq .B      then dy104{i}=0;
  if dy101{i} in (.A,.C) then dy104{i}=11;
  if dy101{i} ge 0       then dy104{i}=dy101{i};

  if dy102{i} in (.A ,.C) then do;
   if dy101{i} le 0 and dy103{i} gt 0 then dy104{i}=11;
   dy105{i}=dy103{i};
  end;
  else if dy102{i} eq .B then dy105{i}=0;
  else dy105{i}=dy102{i};
  dy106{i}=dy104{i}*dy105{i};
 end;
 else dy106{i}=.S;
end;
```

Variable Name ALG2$$

Variable Label Unemployment benefit II

Unit of Observation Household

Period Annual

Description This variable represents the household income from unemployment benefit II including social benefit in the last year.

Method Unemployment benefit II is the product of the number of months that benefit was claimed in the previous year and the average amount per month. It was asked the first time in wave W (variable wh4806 in SOEP file WH).
In 2021, an additional Corona bonus of €150 per adult was granted once.

Format The value of this variable ranges from 0 to 99.999.
This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array ey101{*} wh4805 xh4805 yh4905 zh4908 bah4908 bbh4908 bch4908 bdh4908 beh5211
               bfh4818 bgh6611 bhh_59_11 bih_59_11 bjh_59_11 bkh_72_11 blh_58db_01
               bmh_59_11 bnh_65db_01
array ey102{*} wh4806 xh4806 yh4906 zh4909 bah4909 bbh4909 bch4909 bdh4909 beh5212
               bfh4819 bgh6612 bhh_59_12 bih_59_12 bjh_59_12 bkh_72_12 blh_58db_02
               bmh_59_12 bnh_65db_02
array ey103{*} xwh4806 xxh4806 xyh4906 xzh4909 xbah4909 xbbh4909 xbch4909 xbdh4909
               xbeh5212 x bfh4819 xbgh6612 xbhh_59_12 xbih_59_12 xbjh_59_12
               xbkh_72_12 xblh_58db_02 xbmh_59_12 xbnh_65db_02
array ey104{*} temp1$$;
array ey105{*} temp2$$;
array ey106{*} alg2$$;
do i = 1 to dim(ey101);
 ey104{i}=.; ey105{i}=.;
 if $netto >= 10 & < 20 then do;
  if ey103{i} lt 0 then ey103{i}=0;
  if ey101{i} eq .B      then ey104{i}=0;
  if ey101{i} in (.A,.C) then ey104{i}=11;
  if ey101{i} ge 0       then ey104{i}=ey101{i};

  if ey102{i} in (.A ,.C) then do;
   if ey101{i} le 0 and ey103{i} gt 0 then ey104{i}=11;
   ey105{i}=ey103{i};
  end;
  else if ey102{i} eq .B then ey105{i}=0;
  else ey105{i}=ey102{i};
  ey106{i}=ey104{i}*ey105{i};
 end;
 else ey106{i}=.S;
end;
```

Variable Name	HSUP$$
Variable Label	Housing support for owner-occupiers
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from direct housing support for owner-occupiers in the last year.
Method	In 1996 German law established direct housing subsidy payments for owner-occupiers. Starting in the 2000 survey a separate question was asked about income from this source. Direct housing subsidy payments for respondents who bought homes between 1996 and 1999 were imputed using information about the year of construction, acquisition of ownership and number of children in the household. Since 2015 information about this income has been no longer collected.
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.

Algorithm

```
array bzc101{*} misses misses misses misses misses misses misses misses misses misses
                misses misses ms3904 ns3904 os3904 ps3904 qh3904 rh3904 sh3904 th3504
                uh3504 vh3602 wh3602 xh3602 yh3702 zh3702 bah3702 bbh3702 bch3702
                bdh3702 beh4002 out out out out out
*** imputed values due to item-non response ***
array bzc102{*} misses misses misses misses misses misses misses misses misses misses
                misses misses xms3904 xns3904 xos3904 xps3904 xqh3904 xrh3904 xsh3904
                xth3504 xuh3504 xvh3602 xwh3602 xxh3602 xyh3702 xzh3702 xbah3702
                xbbh3702 xbch3702 xbdh3702 xbeh4002 out out out out out
array bzc103{*} temp1$$;
array bzc106{*} hsup$$;

do i = 1 to dim(netto);
 bzc103{i}=.;
 if netto{i} >= 10 & < 20 then do;
  if bzc102{i} lt 0 then bzc102{i} = 0;
  if bzc101{i} eq .A or bzc101{i} eq .C then bzc103{i}=bzc102{i};
  else if bzc101{i} eq .B              then bzc103{i}=0;
  else                                 bzc103{i}=bzc101{i};
  bzc106{i}=bzc103{i};
 end;
 else bzc106{i}=-2;
end;
```

Variable Name	LOSSR$$
Variable Label	Losses from renting and leasing
Unit of Observation	Household
Period	Annual
Description	This variable represents the household tax deductible costs or losses from renting and leasing incurred in the last.
Method	Transcribed variable. It was asked the first time in wave V (variable vh4002 in SOEP file VH).
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.

Algorithm

```
array cw101{*} vh4002 wh4002 xh4002 yh4102 zh4102 bah4102 bbh4102 bch4102 bdh4102
                beh4402 bfh4002 bgh52 bhh_45 bih_45 bjh_46 bkh_58 blh_45 bmh_45
                bnh_52
array cw102{*} xvh4002 xwh4002 xxh4002 xyh4102 xzh4102 xbah4102 xbbh4102 xbch4102
                xbdh4102  xbeh4402 xbfh4002 xbgh52 xbhh_45 xbih_45 xbjh_46 xbkh_58
                xblh_45 xbmh_45 xbnh_52
array cw103{*} temp1$$;
array cw104{*} lossr$$;

do i = 1 to dim(netto);
 cw103{i}=.;
if netto{i} >= 10 & < 20 then do;
  if cw102{i} lt 0 then cw102{i} = 0;
      if cw101{i}=.A or cw101{i}=.C then cw103{i}=cw102{i};
  else if cw101{i}=.B              then cw103{i}=0;
  else                          cw103{i}=cw101{i};
  cw104{i}=cw103{i};
 end;
 else cw104{i}=.S;
end;
```

Variable Name	LOSSC$$
Variable Label	Losses from capital investment
Unit of Observation	Household
Period	Annual
Description	This variable represents the household losses from capital investment in the last year.
Method	Transcribed variable. It was asked the first time in wave V (variable vh4409 in SOEP file VH).
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.

Algorithm

```
array cw201{*} vh4409 wh4409 xh4409 yh4509 zh4509 bah4509 bbh4509 bch4509 bdh4509
                beh4809 bfh4409 bgh6302 bhh_56_02 bih_56_02 bjh_56_02 bkh_69_02
                blh_55_02 bmh_56_02 bnh_62_02
array cw202{*} xvh4409 xwh4409 xxh4409 xyh4509 xzh4509 xbah4509 xbbh4509 xbch4509
                xbdh4509 xbeh4809 xbfh4409 xbgh6302 xbhh_56_02 xbih_56_02 xbjh_56_02
                xbkh_69_02 xblh_55_02 xbmh_56_02 xbnh_62_02
array cw203{*} temp1$$;
array cw204{*} lossc$$;

do i = 1 to dim(netto);
 cw203{i}=.;
if netto{i} >= 10 & < 20 then do;
  if cw202{i} lt 0 then cw202{i} = 0;
      if cw201{i} in (.A,.C) then cw203{i}=cw202{i};
  else if cw201{i}=.B        then cw203{i}=0;
  else                       cw203{i}=cw201{i};
  cw204{i}=cw203{i};
 end;
 else cw204{i}=.S;
end;
```

Variable Name ADCHB$$

Variable Label Additional Child Benefit

Unit of Observation Household

Period Annual

Description This variable represents the household income from additional child benefit in the last year.

Method Transcribed variable.
It was asked the first time in wave Z (variable ZH4906 in SOEP file ZH).

Format The value of this variable ranges from 0 to 99.999.
This variable is in current year EURO.

The original survey variables provided below can be found in the file _H.
This algorithm omits individuals with survey non-responses.

Algorithm

```
array kp101{*} zh4906 bah4906 bbh4906 bch4906 bdh4906 beh5206 bfh4809 bgh6606
                  bhh_59_06  bih_59_06  bjh_59_06  bkh_72_06  blh_58bb_02  bmh_59_06
                  bnh_65bb_02
array kp103{*} zh4905 bah4905 bbh4905 bch4905 bdh4905 beh5205 bfh4808 bgh6605
                  bhh_59_05  bih_59_05  bjh_59_05  bkh_72_05  blh_58bb_01  bmh_59_05
                  bnh_65bb_01
array kp104{*} xzh4906 xbah4906 xbbh4906 xbch4906 xbdh4906 xbeh5206 xbfh4806
                  xbgh6606  xbhh_59_06  xbih_59_06  bjh_59_06  xbkh_72_06  xblh_58bb_02
                  xbmh_59_06 xbnh_65bb_02
array kp105{*} adchb$$;

do i = 1 to dim(netto);
 if netto=1 then do;
  kp105{i}=0;
  if kp103{i} in (.B,.)  then kp103{i}=0;
  if kp103{i} in (.A,.C) then kp103{i}=6;

  if i ge 26 then do;
    if kp101{i} gt 0         then kp105{i}=kp101{i}*kp103{i};
    if kp101{i} in (.A,.C) then kp105{i}=kp104{i}*kp103{i};

end;
 else kp105{i}=.S;
end;
```

Variable Name	CHSUB$$
Variable Label	Child care subsidy
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from child care subsidy in the last year. This information was asked in 2014-2016 only.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2013, 2017-: N/a 2014-2016:

```
array f101{*} beh5208 bfh4813 bgh6608
array f102{*} beh5209 bfh4814 bgh6609
array f103{*} xbeh5209 xbfh4814 xbgh6609
array f104{*} temp1
array f105{*} temp2
array f106{*} chsub14 chsub15 chsub16;

do i = 1 to dim(netto);
 f104{i}=.;  f105{i}=.;
 if f103{i} lt 0          then f103{i} =  0;
 if f101{i} in (.A,.C) then f101{i} = 12;

 if netto{i}=1 then do;
    if f101{i} = .B    then f104{i}=0;
  else f104{i} =              f101{i};

  if f102{i} in (.A,.C) then do;
   if f101{i} le 0 and f103{i} gt 0 then f104{i}=12;
   f105{i}=f103{i};
  end;
  else if f102{i} eq .B then f105{i}=0;
  else f105{i}=f102{i};
  f106{i}=f104{i}*f105{i};
 end;
 else f106{i}=.S;
end;
```

Variable Name	KIDY$$
Variable Label	Income of children
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from all children up to the age of 16 years living in the household. This information was asked in 2016 only.
Method	Transcribed variable. Information about this income component was asked the first time in wave BG (variables hnet1ka hnet2ka hnet1kb hnet2kb hnet1kc hnet2kc hnet1kd hnet2kd hnet1ke hnet2ke hnet1kf hnet2kf hnet1kg hnet2kg hnet1kh hnet2kh hnet1ki hnet2ki hnet1kj hnet2kj in SOEP file $$H_KIND).
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. This algorithm omits individuals with survey non-responses.

Algorithm	1984-2015, 2017: N/a
	
	2016:
	
	gen kidy$$=0;
	foreach x in a b c d e f g h i j {;
	replace hnet1k`x'=-1 if inlist(hnet2k`x',-1,-3);
	qui sum hnet1k`x' if hnet1k`x'>-1, d;
	replace hnet1k`x'= r(p50) if inlist(hnet1k`x',-1,-3);
	replace hnet1k`x'=0 if inlist(hnet1k`x',-2);
	replace hnet1k`x'=. if inlist(hnet1k`x',-5);
	replace kidy$$=kidy$$+hnet1k`x' if hnet1k`x'>=0 & hnet1k`x'<.;
	};

Variable Name	EDUPAC$$
Variable Label	Benefits from the educational package
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from benefits from the educational package. In 1984-2016 this information was not asked.
Method	Transcribed variable. It was asked the first time in wave BH (variable BHH_59_06 in SOEP file BHH).
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2016: N/a Since 2017:

```
array g101{*} bhh_59_08 bih_59_08 bjh_59_08 bkh_72_08 blh_58cb_01 bmh_59_08
              bnh_65cb_01
array g102{*} bhh_59_09 bih_59_09 bjh_59_09 bkh_72_09 blh_58cb_02 bmh_59_09
              bnh_65cb_02
array g103{*} xbhh_59_09 xbih_59_09 xbjh_59_09 xbkh_72_09 xblh_58cb_02 xbmh_59_09
              xbnh_65cb_02
array g104{*} temp1
array g105{*} temp2
array g106{*} edupac17 edupac18 edupac19

do i = 1 to dim(netto);
 g104{i}=.;  g105{i}=.;
 if g103{i} lt 0       then g103{i} =  0;
 if g101{i} in (.A,.C) then g101{i} = 12;    *** INR ***;

 if infam{i}=1 then do;
   if g101{i} in (.,.B,.D) then g104{i}=0;
 else                       g104{i} = g101{i};

  if g102{i} in (.A,.C) then do;
   if g101{i} le 0 and g103{i} gt 0 then g104{i}=12;
   g105{i}=g103{i};
  end;
  else if g102{i} in (.,.B,.D) then g105{i}=0;
  else                          g105{i}=g102{i};
  g106{i}=g104{i}*g105{i};
 end;
 else g106{i}=.S;
end;
```

Variable Name	ASYL$$
Variable Label	Asylum seeker benefit
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from asylum seekers benefits. In 1984-2016 this information was not asked.
Method	Transcribed variable. It was asked the first time in wave BH (variable BHH_71_q66 in SOEP file BHH). In 2021, an additional Corona bonus of €150 per adult was granted once.
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.

Algorithm

1984-2016: N/a
Since 2017:

```
array h101{*} bhh_70_q66 bih_73_q116 bjh_65_q149 bkh_65_q205 blh_65_q292
              bmh_65_q310 bnh_50_q346
array h102{*} bhh_71_q66 bih_72_01_q116 bjh_66_q149 bkh_66_q205 blh_66_q292
              bmh_66_q310 bnh_51_q346
array h103{*} xbhh_71_q66 xbih_72_01_q116 xbjh_66_q149 xbkh_66_q205 xblh_66_q292
              xbmh_66_q310 xbnh_51_q346
array h104{*} temp1
array h105{*} temp2
array h106{*} asyl17 asyl18 asyl19 asyl20 asyl21 asyl22

do i = 1 to dim(netto);
 h104{i}=.;
 h105{i}=.;
 if h103{i} lt 0       then h103{i} =  0;
 if h101{i} in (.A,.C) then h101{i} = 12;    *** INR ***;

 if infam{i}=1 then do;
   if h101{i} in (.,.B,.D) then h104{i}=0;
  else                        h104{i} = h101{i};

  if h102{i} in (.A,.C) then do;
   if h101{i} le 0 and h103{i} gt 0 then h104{i}=12;
   h105{i}=h103{i};
  end;
  else if h102{i} in (.,.B,.D) then h105{i}=0;
  else                          h105{i}=h102{i};
  h106{i}=h104{i}*h105{i};
 end;
 else h106{i}=.S;
end;
```

Variable Name	BAUK$$
Variable Label	Building subsidy for new property owners
Unit of Observation	Household
Period	Annual
Description	This variable represents the household income from building subsidy for new property owners (“Baukindergeld”). In 1984-2019 this information was not asked.
Method	Transcribed variable. It was asked the first time in wave BK (variable BKH_28 in SOEP file BKH).
Format	The value of this variable ranges from 0 to 99.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2019: N/a Since 2019:

```
array bda101{*}  bkh_28 blh_27 bmh_26 bnh_27
array bda102{*}  bkh_73_03 blh_59ab_02 bmh_60_03 bnh_66ab_02
array bda103{*} bauk$$;
array bda105{*} xbauk$$;

do i = 1 to dim(aa100);
 bda103{i}=.;
 if aa100{i}=1 then do;
  bda103{i} = 0;
  if bda101{i} in (2,.A,.B.,.C,.D)                    then bda103{i}=0;
  if bda101{i} = 1 & bda102{i} > 0                    then bda103{i}=1200*bda102{i};
  if bda101{i} = 1 & bda102{i} in (.A,.B,.C,.D) then bda103{i}=1200;
 end;
 else bda103{i}=.S;
end;
```

Variable Name	FRENTY$$	Imputation flag: Income from rental and leasing
	FOPERY$$	Imputation flag: Operation, maintenance costs
	FDIVDY$$	Imputation flag: Interest, dividend income
	FCHSPT$$	Imputation flag: Child allowance
	FHOUSE$$	Imputation flag: Housing benefit
	FNURSH$$	Imputation flag: Nursing allowances
	FSUBST$$	Imputation flag: Social assistance
	FSPHLP$$	Imputation flag: Social assistance for spec. circumstances
	FSSOLD$$	Imputation flag: Social assistance for elderly
	FALG2$$	Imputation flag: Unemployment benefit II
	FHSUP$$	Imputation flag: Housing support for owner-occupiers
	FLOSSR$$	Imputation flag: Losses from renting and leasing
	FLOSSC$$	Imputation flag: Losses from capital investment
	FADCHB$$	Imputation flag: Additional child benefit
	FCHSUB$$	Imputation flag: Child care subsidy
	FKIDY$$	Imputation flag: Income of children
	FEDUPAC$$	Imputation flag: Benefits from the educational package
	FASYL$$	Imputation flag: Asylum seeker benefit
	FBAUK$$	Imputation flag: Building subsidy for new property owners

Variable Label Imputation flag for the respective income component

Unit of Observation Household

Description This variable indicates if the respective income component has been imputed.
The predominant imputation technique used to fill in missing values is based on the row and column imputation procedure developed by Little and Su (1989). In the case of lacking longitudinal data purely cross-sectional imputation techniques are applied. For further details, see: Grabka and Frick (2003).

Method In the original SOEP data there are three types of missing values. These missing values can be interpreted as:

-1 = no answer or do not know
-2 = does not apply
-3 = original value was deleted because it was found to be implausible

The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.

Format 0 = Not Imputed
1 = Fully Imputed

This algorithm omits individuals with survey non-responses.

Variable Name	IJOB1$$
Variable Label	Wages, Salary from main job
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross wages or salary from main job of individuals in the household 16 years of age and older.
Method	Wages or salary from main job is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IJOB1$$ = ($P2A02 * $P2A03)

Variable Name	IJOB2$$
Variable Label	Income from secondary employment
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from secondary employment of individuals in the household 16 years of age and older.
Method	Income from secondary employment is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IJOB2$$ = ($P2C02 * $P2C03)

Variable Name	ISELF$$
Variable Label	Income from self-employment
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from self-employment of individuals in the household 16 years of age and older.
Method	Income from self-employment is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	ISELF$$ = ($P2B02 * $P2B03)

Variable Name	IOLDY$$
Variable Label	Combined old-age, disability and civil servants pensions
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from combined old-age, disability and civil servants pensions of individuals in the household 16 years of age and older. In 2002 and 2003 separate questions regarding income from private or company pension were asked. Thus these incomes components are not included in old-age, disability and civil servants pensions in the those years.
Method	Income from combined old-age, disability and civil servants pensions is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IOLDY$$ = ($P2D02 * $P2D03)

Variable Name	IWIDY$$
Variable Label	Combined widows and orphans pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from combined widows and orphans pension of individuals in the household 16 years of age and older. In 2002 and 2003 separate questions regarding income from private or company pension were asked. Thus these incomes components are not included in widows and orphans pension in the those years.
Method	Income from combined widows and orphans pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IWIDY$$ = ($P2E02 * $P2E03)

Variable Name	ICOMP$$
Variable Label	Combined company pension (surviving dependants c.p.)
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from combined company pension of individuals in the household 16 years of age and older. In 1984-2001 and since 2004 specific questions related to this topic were not asked. Thus these income component is included in old-age, disability and civil servants pensions (IOLDY$$) in the those years.
Method	Income from combined company pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2001: N/a 2002-2003: ICOMP$$ = ($P2P02 * $P2P03) ($$=02 – 03, $ = S-T) since 2004: N/a

Variable Name	IPRVP$$
Variable Label	Combined private pension (old-age, accident, disability)
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from combined private pension of individuals in the household 16 years of age and older. In 1984-2001 and since 2004 specific questions related to this topic were not asked. Thus these income component is included in old-age, disability and civil servants pensions (IOLDY$$) in the those years.
Method	Income from combined private pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2001: N/a 2002-2003: IPRVP$$ = ($P2Q02 * $P2Q03) ($$=02 – 03, $ = S-T) since 2004: N/a

Variable Name	IUNBY$$
Variable Label	Unemployment benefit
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from unemployment benefit of individuals in the household 16 years of age and older.
Method	Income from unemployment benefit is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IUNBY$$ = ($P2F02 * $P2F03)

Variable Name	IUNAY$$
Variable Label	Unemployment assistance
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from unemployment assistance of individuals in the household 16 years of age and older. In 2006 this information is no longer relevant, given that unemployment assistance has been replaced by unemployment benefit II (ALG2$$)
Method	Income from unemployment assistance is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2005: IUNAY$$ = ($P2G02 * $P2G03) since 2006: N/a

Variable Name	ISUBY$$
Variable Label	Subsistence allowance
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from subsistence allowance of individuals in the household 16 years of age and older. In 2015 information about this income has no longer been collected.
Method	Income from subsistence allowance is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	ISUBY$$ = ($P2H02 * $P2H03) since 2015: N/a

Variable Name	IERET$$
Variable Label	Old-age transition benefit
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from old-age transition benefit of individuals in the household 16 years of age and older. This information was collect in 1996-2001 only.
Method	Income from old-age transition benefit is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1995: N/a 1996-2001: IERET$$ = ($P2I02 * $P2I03) ($$=96 – 01, $ = M, N, … , R) since 2002: N/a

Variable Name	IMATY$$
Variable Label	Maternity benefit
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from maternity benefit of individuals in the household 16 years of age and older.
Method	Income from maternity benefit is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IMATY$$ = ($P2J02 * $P2J03)

Variable Name	ISTUY$$
Variable Label	Student grants
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from student grants of individuals in the household 16 years of age and older.
Method	Income from student grants is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	ISTUY$$ = ($P2K02 * $P2K03)

Variable Name	IMILT$$
Variable Label	Military community service pay
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from military community service pay of individuals in the household 16 years of age and older. In 1984-1995 questions related to this topic were not asked. Since 2015 information about this income has no longer been collected.
Method	Income from military community service pay is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1995: N/a since 1996: IMILT$$ = ($P2L02 * $P2L03) since 2015: N/a

Variable Name	IALIM$$
Variable Label	Alimony
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from alimony of individuals in the household 16 years of age and older. In 1984-2000 specific questions related to this topic were not asked. Alimony is included in private transfers received (IELSE$$) in the those years. Since 2010 alimony and advance child maintenance payments are surveyed separately. Since 2015 information about this income has been no longer collected, but can be found in the variables ICHSU$$ and ISPOU$$.
Method	Income from alimony is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2000: N/a 2001-2009: IALIM$$ = ($P2O02 * $P2O03) since 2010: IALIM$$ = ($P2S02 * $P2S03) since 2015: N/a

Variable Name	IACHM$$
Variable Label	Advance child maintenance payment
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from advance child maintenance payments of individuals in the household 16 years of age and older. In 1984-2009 specific questions related to this topic were not asked. Advance child maintenance payments is included in private transfers received (IELSE$$) in the those years.
Method	Income from advance child maintenance payments is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2009: N/a since 2010: IACHM$$ = ($P2T02 * $P2T03)

Variable Name	ICHSU$
Variable Label	Child support, caregiver alimony
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from child support, caregiver alimony of individuals in the household 16 years of age and older. In 1984-2014 specific questions related to this topic were not asked. Child support, caregiver alimony is included in private transfers received (IELSE$$) in the those years. In 2016 information about child support and spousal support are now integrated in one variable.
Method	Income from child support, caregiver alimony is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2014: N/a 2015: ICHSU$$ = ($P2U02 * $P2U03) Since 2016 ICHSU$$ = ($P2W02 * $P2W03)

Variable Name	ISPOU$$
Variable Label	Divorce alimony, during separation
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from divorce alimony, during separation of individuals in the household 16 years of age and older. In 1984-2014 specific questions related to this topic were not asked. Divorce alimony, during separation is included in private transfers received (IELSE$$) in the those years. Since 2016 this information is no longer collected as a single variable (see ICHSU$).
Method	Income from divorce alimony, during separation is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2014: N/a 2015: ISPOU$$ = ($P2V02 * $P2V03) Sicne 2016: N/a

Variable Name	IELSE$$
Variable Label	Private Transfers received
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from private transfers of individuals in the household 16 years of age and older. In 1984-2000 alimony is included in private transfers. Since 2001 a specific question regarding alimony (IALIM$$) were asked, thus alimony is no longer included in private transfers received.
Method	Income from private transfers is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	IELSE$$ = ($P2M02 * $P2M03)

Variable Name	IWITH$$
Variable Label	Profit Withdrawal
Unit of Observation	Individual
Period	Annual
Description	This variable represents income gross from profit withdrawal of individuals in the household 16 years of age and older. This information was collected in 2016 and 2017 only.
Method	Income from profit withdrawal is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2015: N/a 2016-2017: IWITH$$ = ($P2X02 * ($P2X03) Since 2018: N/a

Variable Name	ISICK$$
Variable Label	Sickness benefit
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from sickness benefits of individuals in the household 17 years of age and older. This information was collected since 2021.
Method	Sickness benefits is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2020: N/a Since 2021: ISICK$$ = ($P2Y02 * ($P2Y03)

Variable Name	I13LY$$
Variable Label	13th monthly salary
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from gross 13th monthly salary of individuals in the household 16 years of age and older.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	I13LY$$ = Y13 13th monthly salary variable list by survey year - each entry denoted in algorithm as Y13: ap3902 bp5902 cp5902 dp5902 ep5402 fp7202 gp7202 hp6702 ip6702 jp7702 kp7702 lp8202 mp6802 np6802 op5902 pp7702 qp7702 rp7702 sp7702 tp9502 up8002 vp10102 wp7802 xp9502 yp9602 zp9202 bap8302 bbp9302 bcp8102 bdp9902 bep8602 bfp11502 bgp10102 bhp11902 bip_120_02 bjp_104_02 bkp_119_02 blp_126_08 bmp_115_08 bnp_130_08

Variable Name	I14LY$$
Variable Label	14th monthly salary
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from gross 14th monthly salary of individuals in the household 16 years of age and older.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	I14LY$$ = Y14 14th monthly salary variable list by survey year - each entry denoted in algorithm as Y14: ap3904 bp5904 cp5904 dp5904 ep5404 fp7204 gp7204 hp6704 ip6704 jp7704 kp7704 lp8204 mp6804 np6804 op5904 pp7704 qp7704 rp7704 sp7704 tp9504 up8004 vp10104 wp7804 xp9504 yp9604 zp9204 bap8304 bbp9304 bcp8104 bdp9904 bep8604 bfp11504 bgp10104 bhp11904 bip_120_04 bjp_104_04 bkp_119_04 blp_126_09 bmp_115_09 bnp_130_09

Variable Name	IXMAS$$
Variable Label	Christmas bonus
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from gross Christmas bonus of individuals in the household 16 years of age and older.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	IXMAS$$ = YXMS Christmas bonus variable list by survey year - each entry denoted in algorithm as YXMS: ap3906 bp5906 cp5906 dp5906 ep5406 fp7206 gp7206 hp6706 ip6706 jp7706 kp7706 lp8206 mp6806 np6806 op5906 pp7706 qp7706 rp7706 sp7706 tp9506 up8006 vp10106 wp7806 xp9506 yp9606 zp9206 bap8306 bbp9306 bcp8106 bdp9906 bep8606 bfp11506 bgp10106 bhp11906 bip_120_06 bjp_104_06 bkp_119_06 blp_126_10 bmp_115_10 bnp_130_10

Variable Name	IHOLY$$
Variable Label	Vacation bonus
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from gross vacation bonus of individuals in the household 16 years of age and older.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	IHOLY$$ = YHOL Vacation bonus variable list by survey year - each entry denoted in algorithm as YHOL: ap3908 bp5908 cp5908 dp5908 ep5408 fp7208 gp7208 hp6708 ip6708 jp7708 kp7708 lp8208 mp6808 np6808 op5908 pp7708 qp7708 rp7708 sp7708 tp9508 up8008 vp10108 wp7808 xp9508 yp9608 zp9208 bap8308 bbp9308 bcp8108 bdp9908 bep8608 bfp11508 bgp10108 bhp11908 bip_120_08 bjp_104_08 bkp_119_08 blp_126_11 bmp_115_11 bnp_130_11

Variable Name	IGRAY$$
Variable Label	Profit-sharing
Unit of Observation	Individual
Period	Annual
Description	This variable represents income from gross profit sharing of individuals in the household 16 years of age and older.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	IGRAY$$ = YGRY Profit sharing variable list by survey year - each entry denoted in algorithm as YGRY: ap3910 bp5910 cp5910 dp5910 ep5410 fp7210 gp7210 hp6710 ip6710 jp7710 kp7710 lp8210 mp6810 np6810 op5910 pp7710 qp7710 rp7710 sp7710 tp9510 up8010 vp10110 wp7810 xp9510 yp9610 zp9210 bap8310 bbp9310 bcp8110 bdp9910 bep8610 bfp11510 bgp10110 bhp11910 bip_120_10 bjp_104_10 bkp_119_10 blp_126_12 bmp_115_12 bnp_130_12

Variable Name	IOTHY$$
Variable Label	Other bonuses
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from other bonuses of individuals in the household 16 years of age and older. In 1984 questions related to this topic were not asked. They are included in income from profit sharing (IGRAY84).
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	1984: N/a since 1985: IOTHY$$ Other bonuses variable list by survey year: bp5912 cp5912 dp5912 ep5412 fp7212 gp7212 hp6712 ip6712 jp7712 kp7712 lp8212 mp6812 np6812 op5912 pp7712 qp7712 rp7712 sp7712 tp9512 up8012 vp10112 wp7812 xp9512 yp9612 zp9212 bap8312 bbp9312 bcp8112 bdp9912 bep8612 bfp11512 bgp10112 bhp11912 bip_120_12 bjp_104_12 bkp_119_12 blp_126_13 bmp_115_13 bnp_130_13

Variable Name	ITRAY$$
Variable Label	Commuting expenses, travel grant
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from commuting expenses or travel grants Provided by the employer of individuals in the household 16 years of age and older. In 1984-2005 specific questions related to this topic were not asked. In 2010 and 2011 this information was not asked in subsamples L1, L2 and L3, in 2016 in subsample M3/4.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2005: N/a since 2006: ITRAY$$ Commuting or travel grants variable list by survey year: wp7902 xp9602 yp9702 zp9302 bap8402 bbp9402 bcp8202 bdp10002 bep8702 bfp11602 bgp10202 bhp_120_02 bip_121_02 bjp_105_02 bkp_120_02 blp_127_02 bmp_116_02 bnp_131_02

Variable Name	IDEMY$$
Variable Label	Indemnity payments
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from indemnity payments of individuals in the household 16 years of age and older. In 1984-1990 specific questions related to this topic were not asked. In 2010-2013 this information was not asked in subsamples L1,L2,L3 and M1, in 2016 not in subsample M3/4.
Method	Transcribed variable.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1990: N/a since 1991: IDEMY$$ Indemnity payments variable list by survey year: hp27g02 ip27g02 jp27g02 kp2402 lp2002 mp6502 np6502 op5602 pp7302 qp7302 rp7302 sp7302 tp9102 up7602 vp9702 wp8502 xp9102 yp9202 zp8802 bap7902 bbp8902 bcp7702 bcp9502 bep8202 bfp3002 bgp2902 bhp_31_02 bip_41_02 bjp_27_02 bkp_32_02 blp_29_02 bmp_31_02 bnp_38_02

Variable Name	IGRV1$$
Variable Label	Statutory pension insurance
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from statutory pension insurance of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. Since 2002 the statutory pension insurance did also include the social miners insurance pension (ISMP1$$) and farmers pension (IAGR1$$). In 2016 this information was not asked in subsamples M3/4, in 2017 not for subsample M5.
Method	Income from statutory pension insurance is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka & Groh-Samberg (2010).
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: IGRV1$$ = ($P2D02 * X) Statutory pension insurance variable list by survey year - each entry denoted in algorithm as X: cp6101 dp6101 ep5601 fp7401 gp7401 hp6901 ip6901 jp7901 kp7901 lp8401 mp7001 np7001 op6101 pp7901 qp7901 rp7901 tp9701 up8201 vp10301 wp8001 xp9701 yp9801 zp9401 bap8601 bbp9601 bcp8301 bdp10101 bep8801 bfp11701 bgp10301 bhp_121_01 bip_122_01 bjp_106_01 bkp_121_01 blp_132a_11 bmp_121_12 bnp_140_12

Variable Name	ISMP1$$
Variable Label	Social miners insurance pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from social miners insurance pension of individuals in the household 16 years of age and older. In 1984-1985 and since 2002 specific questions related to this topic were not asked. Since 2002 this income component is included in the statutory pension insurance (IGRV1$$).
Method	Income from social miners insurance pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a 1986-2001: ISMP1$$ = ($P2D02 * X) since 2002: N/a Social miners insurance pension variable list by survey year - each entry denoted in algorithm as X: cp6102 dp6102 ep5602 fp7402 gp7402 hp6902 ip6902 jp7903 kp7903 lp8403 mp7002 np7002 op6102 pp7902 qp7902 rp7902

Variable Name	ICIV1$$
Variable Label	Civil servant pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from civil servant pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from civil servant pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: ICIV1$$ = ($P2D02 * X) Civil servant pension variable list by survey year - each entry denoted in algorithm as X: cp6103 dp6103 ep5603 fp7403 gp7403 hp6903 ip6903 jp7904 kp7904 lp8404 mp7003 np7003 op6103 pp7903 qp7903 rp7903 tp9703 up8203 vp10303 wp8003 xp9703 yp9803 zp9403 bap8603 bbp9603 bcp8303 bdp10103 bep8803 bfp11703 bgp10303 bhp_121_02 bip_122_02 bjp_106_02 bkp_121_02 blp_132a_12 bmp_121_13 bnp_140_13

Variable Name	IWAR1$$
Variable Label	War victim pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from war victim pension of individuals in the household 16 years of age and older. This information is collected in 1986-2001, 2003-2016 only.
Method	Income from war victim pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985, 2002: N/a 1986-2001, 2003-2016: IWAR1$$ = ($P2D02 * X) Since 2017 .: N/a War victim pension variable list by survey year - each entry denoted in algorithm as X: cp6104 dp6104 ep5604 fp7404 gp7404 hp6904 ip6904 jp7905 kp7905 lp8405 mp7004 np7004 op6104 pp7904 qp7904 rp7904 tp9705 up8205 vp10305 wp8005 xp9705 yp9805 zp9413 bap8613 bbp9613 bcp8313 bdp10113 bep8813 bfp11715 bgp10315

Variable Name	IAGR1$$
Variable Label	Farmer Pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from farmer pension of individuals in the household 16 years of age and older. In 1984-1985 and since 2002 specific questions related to this topic were not asked. Since 2002 this income component is included in the statutory pension insurance (IGRV1$$).
Method	Income from farmer pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a 1986-2001: IAGR1$$ = ($P2D02 * X) since 2001: N/a Farmer pension variable list by survey year - each entry denoted in algorithm as X: cp6105 dp6105 ep5605 fp7405 gp7405 hp6905 ip6905 jp7906 kp7906 lp8406 mp7005 np7005 op6105 pp7905 qp7905 rp7905

Variable Name	IGUV1$$
Variable Label	Statutory accident insurance pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from statutory accident insurance pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from statutory accident insurance pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: IGUV1$$ = ($P2D02 * X) Statutory accident insurance pension variable list by survey year - each entry denoted in algorithm as X: cp6106 dp6106 ep5606 fp7406 gp7406 hp6906 ip6906 jp7907 kp7907 lp8407 mp7006 np7006 op6106 pp7906 qp7906 rp7906 tp9707 up8207 vp10307 wp8007 xp9707 yp9807 zp9411 bap8611 bbp9611 bcp8311 bdp10111 bep8811 bfp11713 bgp10313 bhp_121_08 bip_122_08 bjp_106_08 bkp_121_08 blp_132a_18 bmp_121_19 bnp_140_19

Variable Name	IVBL1$$
Variable Label	Supplementary benefits for civil servants
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from supplementary benefits for public sector employees of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from supplementary benefits for public sector employees is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: IVBL1$$ = ($P2D02 * X) Supplementary benefits for public sector employees variable list by survey year - each entry denoted in algorithm as X: cp6107 dp6107 ep5607 fp7407 gp7407 hp6907 ip6907 jp7908 kp7908 lp8408 mp7007 np7007 op6107 pp7907 qp7907 rp7907 tp9709 up8209 vp10309 wp8009 xp9709 yp9809 zp9405 bap8605 bbp9605 bcp8305 bdp10105 bep8805 bfp11705 bgp10305 bhp_121_03 bip_122_03 bjp_106_03 bkp_121_03 blp_132a_13 bmp_121_14 bnp_140_14

Variable Name	ICOM1$$
Variable Label	Company pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from company pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from company pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: ICOM1$$ = ($P2D02 * X) Company pension variable list by survey year - each entry denoted in algorithm as X: cp6108 dp6108 ep5608 fp7408 gp7408 hp6908 ip6908 jp7909 kp7909 lp8409 mp7008 np7008 op6108 pp7908 qp7908 rp7908 tp9711 up8211 vp10311 wp8011 xp9711 yp9811 zp9407 bap8607 bbp9607 bcp8307 bdp10107 bep8807 bfp11707 bgp10307 bhp_121_04 bip_122_04 bjp_106_04 bkp_121_04 blp_132a_13 bmp_121_15 bnp_140_15

Variable Name	IPRV1$$
Variable Label	Private pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from private pension of individuals in the household 16 years of age and older. In 1984-2002 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from private pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2002: N/a since 2003: IPRV1$$ = ($P2D02 * X) Private pension variable list by survey year - each entry denoted in algorithm as X: tp9713 up8213 vp10313 wp8013 xp9713 yp9813 zp9409 bap8609 bbp9609 bcp8309 bdp10109 bep8809 bfp11711 bgp10311 bhp_121_06 bip_122_07 bjp_106_07 bkp_121_07 blp_132a_17 bmp_121_18 bnp_140_18

Variable Name	IRIE1$$
Variable Label	Riester pension plan
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from Riester pension plan of individuals in the household 16 years of age and older. In 1984-2014 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from Riester pension plan is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2014: N/a since 2015: IRIE11$$ = ($P2D02 * X) Riester pension plan variable list by survey year - each entry denoted in algorithm as X: bfp11709 bgp10309 bhp_121_05 bip_122_06 bjp_106_06 bkp_121_06 blp_132a_16 bmp_121_17 bnp_140_17

Variable Name	IAUS1$$
Variable Label	Pensions from another country
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from pensions from another country of individuals in the household 16 years of age and older. In 1984-2016 specific questions related to this topic were not asked.
Method	Income from pensions from another country is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2016: N/a since 2017: IAUS1$$ = ($P2D02 * X) Pensions from another country variable list by survey year - each entry denoted in algorithm as X: BHP_121_08 bip_122_09 bjp_106_09 bkp_121_09 blp_132a_19 bmp_121_20 bnp_140_20

Variable Name	ILIB1$$
Variable Label	Pensions for liberal professions
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from pensions for liberal professions of indi viduals in the household 16 years of age and older. In 1984-2017 questions related to this topic were not asked.
.	
Method	Income from pensions for liberal professions is the product of the number of months that income was received in the previous year and the average amount per month.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2017: N/a since 2018: ILIB1$$ = ($P2D02 * X) Pensions for liberal professions variable list by survey year - each entry denoted in al-gorithm as X: bip_122_05 bjp_106_05 bkp_121_05 blp_132a_15 bmp_121_16 bnp_140_16

Variable Name	ISON1$$
Variable Label	Other pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from other pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from other pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: ISON1$$ = ($P2D02 * X) Other pension variable list by survey year - each entry denoted in algorithm as X: cp6109 dp6109 ep5609 fp7409 gp7409 hp6909 ip6909 jp7910 kp7910 lp8410 mp7009 np7009 op6109 pp7909 qp7909 rp7909 tp9715 up8215 vp10315 wp8015 xp9715 yp9815 zp9415 bap8615 bbp9615 bcp8315 bdp10115 bep8815 bfp11717 bgp10317 bhp_121_09 bip_122_10 bjp_106_10 bkp_121_10 blp_132a_20 bmp_121_21 bnp_140_21

Variable Name	IGRV2$$
Variable Label	Widows and orphans statutory pension insurance
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans statutory pension insurance of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. Since 2002 the widows and orphans statutory pension insurance does also include the widows and orphans social miners insurance pension (ISMP2$$) and widows and orphans farmers pension (IAGR2$$). In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans statutory pension insurance is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: IGRV2$$ = ($P2E02 * X) Widows and orphans statutory pension insurance variable list by survey year - each entry denoted in algorithm as X: cp6110 dp6110 ep5610 fp7410 gp7410 hp6910 ip6910 jp7911 kp7911 lp8411 mp7010 np7010 op6110 pp7910 qp7910 rp7910 tp9702 up8202 vp10302 wp8002 xp9702 yp9802 zp9402 bap8602 bbp8602 bcp8302 bdp10102 bep8802 bfp11702 bgp10302 bhp_121_12 bip_122_13 bjp_106_13 bkp_121_13 blp_132b_12 bmp_121_1_12 bnp_140_1_12

Variable Name	ISMP2$$
Variable Label	Widows and orphans social miners insurance pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans social miners insurance pension of individuals in the household 16 years of age and older. In 1984-1985 and since 2002 specific questions related to this topic were not asked. Since 2002 this income component is included in the statutory pension insurance (IGRV2$$).
Method	Income from widows and orphans social miners insurance pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a 1986-2001: ISMP2$$ = ($P2E02 * X) since 2002: N/a Widows and orphans social miners insurance pension variable list by survey year - each entry denoted in algorithm as X: cp6111 dp6111 ep5611 fp7411 gp7411 hp6911 ip6911 jp7913 kp7913 lp8413 mp7011 np7011 op6111 pp7911 qp7911 rp7911

Variable Name	ICIV2$$
Variable Label	Widows and orphans civil servant pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans civil servant pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans civil servant pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: ICIV2$$ = ($P2E02 * X) Widows and orphans civil servant pension variable list by survey year - each entry denoted in algorithm as X: cp6112 dp6112 ep5612 fp7412 gp7412 hp6912 ip6912 jp7914 kp7914 lp8414 mp7012 np7012 op6112 pp7912 qp7912 rp7912 tp9704 up8204 vp10304 wp8004 xp9704 yp9804 zp9404 bap8604 bbp8604 bcp8304 bdp10104 bep8804 bfp11704 bgp10304 bhp_121_13 bip_122_14 bjp_106_14 bkp_121_14 blp_132b_13 bmp_121_1_13 bnp_140_1_13

Variable Name	IWAR2$$
Variable Label	Widows and orphans war victim pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans war victim pension of individuals in the household 16 years of age and older. This information was collect in 1986-2001 and 2003-2016, only. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans war victim pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985, 2002, 2017, ...: N/a 1986-2001, 2003-2016: IWAR2$$ = ($P2E02 * X) Widows and orphans war victim pension variable list by survey year - each entry denoted in algorithm as YWAR: cp6113 dp6113 ep5613 fp7413 gp7413 hp6913 ip6913 jp7915 kp7915 lp8415 mp7013 np7013 op6113 pp7913 qp7913 rp7913 tp9706 up8206 vp10306 wp8006 xp9706 yp9806 zp9414 bap8614 bbp8614 bcp8314 bdp10114 bep8814 bfp11716 bgp10316

Variable Name	IAGR2$$
Variable Label	Widows and orphans farmer Pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans farmer pension of individuals in the household 16 years of age and older. In 1984-1985 and since 2002 specific questions related to this topic were not asked. Since 2002 this income component is included in the statutory pension insurance (IGRV2$$).
Method	Income from widows and orphans farmer pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a 1986-2001: IAGR2$$ = ($P2E02 * X) since 2001: N/a Widows and orphans Farmer pension variable list by survey year - each entry denoted in algorithm as X: cp6114 dp6114 ep5614 fp7414 gp7414 hp6914 ip6914 jp7916 kp7916 lp8416 mp7014 np7014 op6114 pp7914 qp7914 rp7914

Variable Name	IGUV2$$
Variable Label	Widows and orphans statutory accident insurance
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans statutory accident insurance pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans statutory accident insurance pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: IGUV2$$ = ($P2E02 * X) Widows and orphans statutory accident insurance pension variable list by survey year - each entry denoted in algorithm as X: cp6115 dp6115 ep5615 fp7415 gp7415 hp6915 ip6915 jp7917 kp7917 lp8417 mp7015 np7015 op6115 pp7915 qp7915 rp7915 tp9708 up8208 vp10308 wp8008 xp9708 yp9808 zp9412 bap8612 bbp8612 bcp8312 bdp10112 bep8812 bfp11714 bgp10314 bhp_121_18 bip_122_20 bjp_106_20 bkp_121_20 blp_132b_19 bmp_121_1_19 bnp_140_1_19

Variable Name	IVBL2$$
Variable Label	Widows and orphans supplement benefits for civil servants
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans supplementary benefits for public sector employees of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans supplementary benefits for public sector employees is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: IVBL2$$ = ($P2E02 * X) Widows and orphans supplementary benefits for public sector employees variable list by survey year - each entry denoted in algorithm as X: cp6116 dp6116 ep5616 fp7416 gp7416 hp6916 ip6916 jp7918 kp7918 lp8418 mp7016 np7016 op6116 pp7916 qp7916 rp7916 tp9710 up8210 vp10310 wp8010 xp9710 yp9810 zp9406 bap8606 bbp8606 bcp8306 bdp10106 bep8806 bfp11706 bgp10306 bhp_121_14 bip_122_15 bjp_106_15 bkp_121_15 blp_132b_14 bmp_121_1_14 bnp_140_1_14

Variable Name	ICOM2$$
Variable Label	Widows and orphans company pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans company pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans company pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: ICOM2$$ = ($P2E02 * X) Widows and orphans company pension variable list by survey year - each entry denoted in algorithm as X: cp6117 dp6117 ep5617 fp7417 gp7417 hp6917 ip6917 jp7919 kp7919 lp8419 mp7017 np7017 op6117 pp7917 qp7917 rp7917 tp9712 up8212 vp10312 wp8012 xp9712 yp9812 zp9408 bap8608 bbp8608 bcp8308 bdp10108 bep8808 bfp11708 bgp10308 bhp_121_15 bip_122_16 bjp_106_16 bkp_121_16 blp_132b_15 bmp_121_1_15 bnp_140_1_15

Variable Name	IPRV2$$
Variable Label	Widows and orphans private pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans private pension of individuals in the household 16 years of age and older. In 1984-2002 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans private pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2002: N/a since 2003: IPRV2$$ = ($P2E02 * X) Widows and orphans private pension variable list by survey year - each entry denoted in algorithm as X: tp9714 up8214 vp10314 wp8014 xp9714 yp9814 zp9410 bap8610 bbp8610 bcp8310 bdp10110 bep8810 bfp11712 bgp10320 bhp_121_17 bip_122_19 bjp_106_19 bkp_121_19 blp_132b_18 bmp_121_1_18 bnp_140_1_18

Variable Name	IRIE2$$
Variable Label	Widows Riester pension plan
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows and orphans Riester pension plan of individuals in the household 16 years of age and older. In 1984-2014 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from widows and orphans Riester pension plan is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2014: N/a since 2015: IRIE2$$ = ($P2E02 * X) Widows and orphans private pension variable list by survey year - each entry denoted in algorithm as X: bfp11710 bgp10310 bhp_121_16 bip_122_18 bjp_106_18 bkp_121_18 blp_132b_17 bmp_121_1_17 bnp_140_1_17

Variable Name	IAUS2$$
Variable Label	Widows / orphans pensions from another country
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows / orphans pensions from another country of individuals in the household 16 years of age and older. In 1984-2016 specific questions related to this topic were not asked.
Method	Income from widows / orphans pensions from another country is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2016: N/a since 2017: IAUS1$$ = ($P2D02 * X) Widows / orphans pensions from another country variable list by survey year - each entry denoted in algorithm as X: bhp_121_19 bip_122_21 bjp_106_21 bkp_121_21 blp_132b_20 bmp_121_1_20 bnp_140_1_20

Variable Name	ILIB2$$
Variable Label	Widows / orphans pensions for liberal professions
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from widows / orphans pensions for liberal professions of individuals in the household 16 years of age and older. In 1984-2017 specific questions related to this topic were not asked.
Method	Income from widows / orphans pensions for liberal professions is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2017: N/a since 2018: ILIB2$$ = ($P2D02 * X) Widows / orphans pensions for liberal professions variable list by survey year - each entry denoted in algorithm as X: bip_122_17 bjp_106_17 bkp_121_17 blp_132b_16 bmp_121_1_16 bnp_140_1_16

Variable Name	ISON2$$
Variable Label	Other widows or orphans pension
Unit of Observation	Individual
Period	Annual
Description	This variable represents gross income from other widows or orphans pension of individuals in the household 16 years of age and older. In 1984-1985 specific questions related to this topic were not asked. In 2016 this information was not asked in subsamples M3/4.
Method	Income from other widows or orphans pension is the product of the number of months that income was received in the previous year and the average amount per month. If the information about the number of months is missing, the sample mean of that variable has been assigned.
Format	The value of this variable ranges from 0 to 999.999. This variable is in current year EURO. The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-1985: N/a since 1986: ISON2$$ = ($P2E02 * X) Other widows or orphans pension variable list by survey year - each entry denoted in algorithm as X: cp6118 dp6118 ep5618 fp7418 gp7418 hp6918 ip6918 jp7920 kp7920 lp8420 mp7018 np7018 op6118 pp7918 qp7918 rp7918 tp9716 up8216 vp10316 wp8016 xp9716 yp9816 zp9416 bap8616 bbp8616 bcp8316 bdp10116 bep8816 bfp11718 bgp10318 bhp_121_20 bip_122_22 bjp_106_22 bkp_121_22 blp_132b_21 bmp_121_1_21 bnp_140_1_21

Variable Name	FJOB1$$	Imputation flag: Wages, Salary from main job
	FJOB2$$	Imputation flag: Income from secondary job
	FSELF$$	Imputation flag: Income from self-employment
	FUNBY$$	Imputation flag: Unemployment benefit
	FOLDY$$	Imputation flag: Old-age, civil servants pens
	FWIDY$$	Imputation flag: Widows / orphans pension
	FCOMP$$	Imputation flag: Combined company pension
	FPRVP$$	Imputation flag: Combined private pension
	FUNAY$$	Imputation flag: Unemployment assistance
	FSUBY$$	Imputation flag: Subsistence allowance
	FERET$$	Imputation flag: Old-age transition benefit
	FMATY$$	Imputation flag: Maternity benefit
	FSTUY$$	Imputation flag: Student grant
	FMILT$$	Imputation flag: Military community service pay
	FALIM$$	Imputation flag: Alimony
	FACHM$$	Imputation flag: Advance child maintenance payment
	FCHSU$$	Imputation flag: Child support, caregiver alimony
	FSPOU$$	Imputation flag: Divorce alimony, during separation
	FELSE$$	Imputation flag: Private Transfers received
	FWITH$$	Imputation flag: Profit Withdrawal
	FSICK$$	Imputation flag: Sickness benefit
	F13LY$$	Imputation flag: 13th monthly salary
	F14LY$$	Imputation flag: 14th monthly salary
	FXMAS$$	Imputation flag: Christmas bonus
	FHOLY$$	Imputation flag: Vacation bonus
	FGRAY$$	Imputation flag: Profit-sharing
	FOTHY$$	Imputation flag: Other bonuses
	FTRAY$$	Imputation flag: Commuting, travel grant
	FDEMY$$	Imputation flag: Indemnity

Variable Label Imputation flag: for respective income component

Unit of Observation Individual

Description This variable indicates if income from the respective income component has been imputed.
The predominant imputation technique used to fill in missing values is based on the row and column imputation procedure developed by Little and Su (1989). In the case of lacking longitudinal data purely cross-sectional imputation techniques are applied. For further details, see: Grabka and Frick (2003).

Method In the original SOEP data there are three types of missing values. These missing values can be interpreted as:

-1 = no answer or do not know
-2 = does not apply
-3 = original value was deleted because it was found to be implausible

The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.

Format 0 = Not Imputed
1 = Fully Imputed

This algorithm omits individuals with survey non-responses.

Variable Name	FGRV1$$ / FGRV2$$
Variable Label	Imputation flag: statutory pension insurance / Imputation flag: widows or orphans statutory pension insurance
Unit of Observation	Individual
Description	This variable indicates if income from the respective pension has been imputed. In order to reduce complexity and because of minor incidence, the imputation flag variable FGVR1$$ and FGRV2$$ encompasses also imputation of item-non-response on any of the considered variables related to (own) pension income. The predominant imputation technique used to fill in missing values is based on the row and column imputation procedure developed by Little and Su (1989). In the case of lacking longitudinal data purely cross-sectional imputation techniques are applied. For further details, see: Grabka and Frick (2003).
Method	In the original SOEP data there are three types of missing values. These missing values can be interpreted as: -1 = no answer or do not know -2 = does not apply -3 = original value was deleted because it was found to be implausible The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.
Format	0 = Not Imputed 1 = Fully Imputed This algorithm omits individuals with survey non-responses.

Variable Name	M11101$$
Variable Label	Whether spent night in hospital in last year
Unit of Observation	Individual
Description	Indicates whether person stayed overnight in a hospital at any time in previous year In 1990 and 1993 this information was not asked.
Method	Transcribed variable.
Format	-2 = N/A - Child -1 = Item non-response 0 = Did not stay overnight in a hospital 1 = Stayed overnight in a hospital The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	

```
gen m11101=-2;
replace m11101= 1 if ple0053==1;
replace m11101= 0 if ple0053==2;
replace m11101=-1 if inlist(ple0053,-1,-3);
replace m11101=-5 if ple0053==-5;
```

Variable Name	M11102$$
Variable Label	Number of nights (days) stayed in hospital overnight in past year
Unit of Observation	Individual
Description	Number of nights (days) person stayed overnight in a hospital in previous year In 1990 and 1993 this information was not asked.
Method	Transcribed variable.
Format	-2 = N/A - Child -1 = Item non-response 0 = Did not stay overnight in a hospital 1-365 = Nights (days) spent in hospital The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	

```
gen m11102=-2;
replace m11102=ple0056 if ple0056 >=0 & ple0056<.;
replace m11102= 0 if ple0056==-2;
replace m11102=-1 if inlist(ple0056,-1,-3);
replace m11102=-5 if ple0056==-5;
```

Variable Name	M11103$$
Variable Label	Whether had accident in past year that required hospitalization
Unit of Observation	Individual
Description	Indicates whether person had accident in past year that required he stay overnight in a clinic or hospital. This information is collected for employed persons only. In several years the question related to this topic were not asked.
Method	Transcribed variable.
Format	-2 = N/A - Child / does not apply currently not employed -1 = Item non-response 0 = Had no accident that required overnight stay in a hospital 1 = Had accident that required overnight stay in a hospital The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.

Algorithm	gen m11103=-2;
	replace m11103= 1 if inlist(ple0042,1,2);
	replace m11103= 0 if ple0042==3;
	replace m11103=-1 if inlist(ple0042,-1,-3);
	replace m11103=-5 if ple0042==-5;

Variable Name M11104$$

Variable Label Frequency play sports or exercise

Unit of Observation Individual

Description Indicates how often person plays sports, exercises or walks or swims. In several years the question related to this topic were not asked.

Method Transcribed variable.

Format:

-2 = N/A - Child
-1 = Item non-response
1 = Play sport or exercise once a year or less, almost never, or never
2 = Play sport or exercise several times a year
3 = Play sport or exercise at least once a month
4 = Play sport or exercise at least once a week

The original survey variable provided below can be found in the file PL and YOUTHL. This algorithm omits individuals with survey non-responses.

Algorithm

```
gen m11104=-2;
replace m11104= 4 if inlist(pli0092_h,1,2) | inlist(yli0007,1,2);  *** jede Woche ***;
replace m11104= 3 if inlist(pli0092_h,3,8) | yli0007==3;           *** jeden Monat ***;
replace m11104= 2 if inlist(pli0092_h,4,7) | yli0007==4;           *** seltener ***;
replace m11104= 1 if inlist(pli0092_h,5,6) | yli0007==5;           *** nie ***;
replace m11104=-1 if inlist(pli0092_h,-1,-3) | inlist(yli0007,-1,-3);
replace m11104=-5 if pli0092_h==-5 | yli0007==-5;
```

Variable Name	M11105$$
Variable Label	Have had stroke
Unit of Observation	Individual
Description	Indicates whether a doctor ever diagnosed a stroke
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = has had a stroke The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11105=-2; replace m11105= 1 if ple0016_v1==1 replace m11105= 0 if ple0016_v1==-2 replace m11105=-1 if ple0016_v1==-1 replace m11105=-5 if ple0016_v1==-5

Variable Name	M11106$$
Variable Label	High blood pressure/circulation problems
Unit of Observation	Individual
Description	Indicates whether a doctor ever diagnosed a with high blood pressure or circulation problems
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = Has or had problem with high blood pressure or circulation The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11106=-2; replace m11106= 1 if ple0018_v1==1 replace m11106= 0 if ple0018_v1==-2 replace m11106=-1 if ple0018_v1==-1 replace m11106=-5 if ple0018_v1==-5

Variable Name	M11107$$
Variable Label	Have or had diabetes
Unit of Observation	Individual
Description	Indicates whether a doctor ever diagnosed diabetes
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = Has or had problem with diabetes The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11107=-2; replace m11107= 1 if ple0012_v1==1 replace m11107= 0 if ple0012_v1==-2 replace m11107=-1 if ple0012_v1==-1 replace m11107=-5 if ple0012_v1==-5

Variable Name	M11108$$
Variable Label	Have or had cancer
Unit of Observation	Individual
Description	Indicates whether a doctor ever diagnosed cancer
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = Has or had problem with cancer The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11108=-2; replace m11108= 1 if ple0015_v1==1 replace m11108= 0 if ple0015_v1==-2 replace m11108=-1 if ple0015_v1==-1 replace m11108=-5 if ple0015_v1==-5

Variable Name	M11109$$
Variable Label	Have or had psychiatric problems
Unit of Observation	Individual
Description	Indicates whether a doctor ever diagnosed a depressive diseases.
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = Has or had problem with depressive diseases The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11109=-2; replace m11109= 1 if ple0019_v1==1 replace m11109= 0 if ple0019_v1==-2 replace m11109=-1 if ple0019_v1==-1 replace m11109=-5 if ple0019_v1==-5

Variable Name	M11110$$
Variable Label	Have or had arthritis
Unit of Observation	Individual
Description	Indicates whether person has or had problems with arthritis
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = Has or had arthritis or arthropathy The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11110=-2; replace m11110= 1 if ple0021_v1==1 replace m11110= 0 if ple0021_v1==-2 replace m11110=-1 if ple0021_v1==-1 replace m11110=-5 if ple0021_v1==-5

Variable Name	M11111$$
Variable Label	Angina or heart condition
Unit of Observation	Individual
Description	Indicates whether a doctor ever diagnosed angina or heart condition problems
Method	Transcribed variable
Format:	0 = N/A - Child -1 = Item non-response 1 = Has or had problem with depressive diseases The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.
Algorithm	1984-2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022: Data not available in SOEP gen m11111=-2; replace m11111= 1 if ple0014_v1==1 replace m11111= 0 if ple0014_v1==-2 replace m11111=-1 if ple0014_v1==-1 replace m11111=-5 if ple0014_v1==-5

Variable Name	M11112$$
Variable Label	Have or had asthma or breathing difficulty
Unit of Observation	Individual
Description	Indicates whether person has or had problems with asthma or breathing difficulties
Method	n.a
Format:	n.a.
Algorithm	Information is not available in the SOEP

Variable Name	M11113$$
Variable Label	Need help to climb stairs
Unit of Observation	Individual
Description	Indicates whether person has trouble with or needs help of others to climb stairs. In several years the question related to this topic were not asked.
Method	Transcribed variable.
Format:	-2 = N/A - Child -1 = Item non-response 0 = Doesn't have trouble with stairs or need help with stairs 1 = Has trouble with stairs or needs help of others with stairs The original survey variable provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.

Algorithm	1984-2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015: Data not available in SOEP
	
	gen m11113=-2;
	replace m11113= 1 if inlist(ple0004,1,2);
	replace m11113= 0 if ple0004==3;
	replace m11113=-1 if inlist(ple0004,-1,-3);
	replace m11113=-5 if ple0004==-5;

Variable Name	M11114$$
Variable Label	Have difficulty or need help of others to bathe
Unit of Observation	Individual
Description	Indicates whether person has trouble with or needs help of others to bathe.
Method	n.a
Format:	n.a.
Algorithm	Information is not available in the SOEP

Variable Name	M11115$$
Variable Label	Have difficulty or need help of others to dress
Unit of Observation	Individual
Description	Indicates whether person has trouble with or needs help of others to dress. In 1984-1990 questions related to this topic were not asked.
Method	Transcribed variable.
Format:	-2 = N/A - Child -1 = Item non-response 0 = Doesn't have trouble with or need help of others to dress 1 = Has trouble with or needs help of others to dress The variable provided below are derived from the file HL. This algorithm omits individuals with survey non-responses.
Algorithm	gen simp=0; replace simp=-1 if hlf0359==1 & syear==1991; replace simp= 1 if hlf0359==1 & syear==1991; forvalues i = 1992(1)…. {; replace simp=-1 if hlf0303==1 & syear==`i'; replace simp= 1 if hlf0302==1 & syear==`i'; }; gen m11115=-2; replace m11115= 0 if netto >= 10 & netto<20; replace m11115= 1 if simp== 1; replace m11115=-1 if simp==-1; replace m11115=-2 if syear>=1984 & syear<=1990;

Variable Name	M11116$$
Variable Label	Have difficulty or need help of others to get in/out of bed
Unit of Observation	Individual
Description	Indicates whether person has trouble with or needs help of others to get into/out of bed. In 1984 questions related to this topic were not asked.
Method	Transcribed variable.
Format:	-2 = N/A - Child -1 = Item non-response 0 = Doesn't have trouble with or need help of others to get in/out of bed 1 = Has trouble with or needs help of others to get in/out of bed The variables provided below are derived from file HL. This algorithm omits individuals with survey non-responses.

Algorithm

```
gen gen bed=0;

foreach x in 1985 1986 1987 1988 1989 1990 {;
replace bed = 1 if hlf0293==3 & syear==`x';
replace bed =-1 if hlf0293==-1 & syear==`x';
};

*** 1991 ***;
replace bed =-1 if hlf0364==1 & syear==1991;
replace bed = 1 if hlf0364==1 & syear==1991;

forvalues i = 1992(1)…. {;
replace bed =-1 if hlf0303==1 & syear==`i';
replace bed = 1 if hlf0303==1 & syear==`i';
};

gen m11116=-2;
replace m11116= 0 if netto >= 10 & netto<20;
replace m11116= 1 if bed== 1;
replace m11116=-1 if bed==-1;
replace m11116=-2 if syear==1984;
```

Variable Name M11117$$

Variable Label Have difficulty or need help of others to shop

Unit of Observation Individual

Description Indicates whether person has trouble with or needs help of others to shop.
In 1984 questions related to this topic were not asked.

Method Transcribed variable.

Format:
-2 = N/A - Child
-1 = Item non-response
0 = Doesn't have trouble with or need help of others to shop
1 = Has trouble with or needs help of others to shop

The variables provided below are derived from the original file HL.
This algorithm omits individuals with survey non-responses.

Algorithm

```
gen outh=0;

foreach x in 1985 1986 1987 1988 1989 1990 {;
 replace outh= 1 if hlf0293==1 & syear==`x';
replace outh=-1 if hlf0293==-1 & syear==`x';
};

replace outh=-1 if hlf0349==1 & syear==1991; *** nur 1991 ***;
replace outh= 1 if hlf0349==1 & syear==1991;

forvalues i = 1992(1)…. {;
 replace outh=-1 if hlf0303==1 & syear==`i';
replace outh= 1 if hlf0300==1 & syear==`i';
};

gen m11117=-2;
replace m11117= 0 if netto >= 10 & netto<20;
replace m11117= 1 if outh== 1;
replace m11117=-1 if outh==-1;
replace m11117=-2 if syear==1984;
```

Variable Name	M11118$$
Variable Label	Walk 10+ minutes difficult
Unit of Observation	Individual
Description	Indicates whether person has trouble to walk unaided for 10 or more minutes
Method	n.a
Format:	n.a.
Algorithm	Information is not available in the SOEP

Variable Name M11119$$

Variable Label Difficulty doing housework

Unit of Observation Individual

Description Indicates whether person has trouble doing housework.
In 1984 questions related to this topic were not asked.

Method Transcribed variable.

Format:
-2 = N/A - Child
-1 = Item non-response
0 = Doesn't have trouble doing housework
1 = Has trouble doing housework.

The variables provided below are derived from the original file HL.
This algorithm omits individuals with survey non-responses.

Algorithm

```
gen inh=0

foreach x in 1985 1986 1987 1988 1989 1990 {;
replace inh = 1 if hlf0293==2 & syear==`x';
replace inh =-1 if hlf0293==-1 & syear==`x';
};

replace inh =-1 if hlf0354==1 & syear==1991;
replace inh = 1 if hlf0354==1 & syear==1991;

forvalues i = 1992(1)… {;
replace inh =-1 if hlf0303==1 & syear==`i';
replace inh = 1 if hlf0301==1 & syear==`i';
};

gen m11119=-2;
replace m11119= 0 if netto >= 10 & netto<20;
replace m11119= 1 if inh== 1;
replace m11119=-1 if inh==-1;
replace m11119=-2 if syear==1984;
```

Variable Name	M11120$$
Variable Label	Health limits bending, lifting, stooping
Unit of Observation	Individual
Description	Indicates whether a person's health limits his ability to bend, lift, or stoop
Method	n.a
Format:	n.a.
Algorithm	Information is not available in the SOEP

Variable Name	M11121$$
Variable Label	Health limits vigorous physical activity
Unit of Observation	Individual
Description	Indicates whether person's health limits vigorous physical activity
Method	n.a
Format:	n.a.
Algorithm	Information is not available in the SOEP

Variable Name	M11122$$
Variable Label	Height in centimeters
Unit of Observation	Individual
Description	This variable indicates each person's height in centimeters on the interview date. In 1984-2001, 2003,2005 questions related to this topic were not asked.
Method	Transcribed variable.
Format	-2 = N/A - Child -1 = Item non-response 0 to 220 = Height in centimeters The original survey variables provided below can be found in the file PL and YOUTHL. This algorithm omits individuals with

Algorithm	gen m11122=-2;
	replace m11122=yle0002 if (yle0002 >0 & yle0002 <.);
	replace m11122=ple0006 if (ple0006>0 & ple0006<.);
	replace m11122= 0 if ple0006==3;
	replace m11122=-1 if inlist(ple0006,0,-1,-3) | inlist(yle0002,0,-1,-3);
	replace m11122=-5 if ple0006==-5 | yle0002==-5;

Variable Name	M11123$$
Variable Label	Weight in kilos
Unit of Observation	Individual
Description	This variable indicates each person's weight in kilos on the interview date. In 1984-2001, 2003, 2005, 2023 questions related to this topic were not asked.
Method	Transcribed variable.
Format	-2 = N/A - Child -1 = Item non-response 0 to 400 = Weight in kilos The original survey variables provided below can be found in the file PL and YOUTHL. This algorithm omits individuals with survey non-responses.

Algorithm	gen m11123=-2;
	replace m11123=round(yle0003) if (yle0003 >0 & yle0003 <.);
	replace m11123=ple0007 if (ple0007>0 & ple0007<.);
	replace m11123= 0 if ple0007==3;
	replace m11123=-1 if inlist(ple0007,0,-1,-3) | inlist(yle0003,0,-1,-3);
	replace m11123=-5 if ple0007==-5 | yle0003==-5;

Variable Name	M11124$$
Variable Label	Disability Status of Individual
Unit of Observation	Individual
Description	This variable indicates disability status at the time of the survey for all individuals in the household 16 years of age and older.
Method	Disability is here defined as a share of legally attested disability of more than 30%. In 1986, 1990 and 1993 this information was in SOEP not asked.
Format	-2 = N/A – Child -1 = Item non-response 0 = Not disabled 1 = Disabled The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.

Algorithm	gen m11124=-2;
	replace ple0041_v1= ple0041_v2 if ple0041_v2>=-2 & ple0041_v2<.;
	replace m11124= 0 if (ple0041 >= 0 & ple0041 <30) & syear < 2023;
	replace m11124= 0 if (ple0041_v1>= 0 & ple0041_v1<30) & syear >=2023;
	replace m11124= 0 if ple0041==-2 | ple0041_v1==-2;
	replace m11124= 1 if (ple0041 >=30 & ple0041 <.) & syear < 2023;
	replace m11124= 1 if (ple0041_v1>=30 & ple0041_v1<.) & syear >=2023;
	replace m11124=-1 if inlist(ple0041,-1,-3) | inlist(ple0041_v1,-1,-3);
	replace m11124=-5 if ple0041 ==-5 & syear < 2023;
	replace m11124=-5 if ple0041_v1==-5 & syear >=2023;

Variable Name	M11125$$
Variable Label	Satisfaction With Health
Unit of Observation	Individual
Description	This variable indicates satisfaction with health at the time of the survey for all individuals in the household 16 years of age and older.
Method	Individuals are asked to report how satisfied they are with their health on a scale of 0 to 10, in which 0 means totally unhappy and 10 means totally happy.
Format	-2 = N/A - Child -1 = Item non-response 0 = totally unhappy, ….., 10 = totally happy The original survey variables provided below can be found in the file PL. This algorithm omits individuals with survey non-responses.

Algorithm	gen m11125=-2;
	replace m11125=plh0171 if plh0171>=0 & plh0171<.;
	replace m11125=-1 if inlist(plh0171,-1,-3);
	replace m11125=-5 if plh0171==-5;

Variable Name	M11126$$
Variable Label	Self-Rated Health Status
Unit of Observation	Individual
Description	This variable indicates each person's self-rated health status.
Method	Transcribed variable.
Format:	-2 = N/A - Child -1 = Item non-response 1 = Excellent 2 = Very good 3 = Good 4 = Fair 5 = Poor The original survey variables provided below can be found in the file PL and YOUTHL. This algorithm omits individuals with survey non-responses.

Algorithm	gen m11126=-2;
	replace m11126= yle0001 if (yle0001>= 0 & yle0001<.);
	replace m11126=ple0008 if (ple0008>= 0 & ple0008<.);
	replace m11126=-1 if inlist(ple0008,-1,-3) | inlist(yle0001,-1,-3);
	replace m11126=-5 if (ple0008==-5) | (yle0001==-5);

Variable Name M11127$$

Variable Label Number of doctor visits in previous year

Unit of Observation Individual

Description Number of doctor visits in previous year. The SOEP asked for the number of trips to the doctor's in the last three months. This information is multiplied by 4 to get the annual figure. In the years 1984 to 1987 and 1994 the SOEP asked for various medical specialist. This information was add up to yield one measure.
In 1990 and 1993 the Number of doctor visits were not asked.

Method Transcribed variable

Format:
-2 = N/A - Child
-1 = Item non-response
0 to 400 = doctors visits in previous year.

The original survey variables provided below can be found in the file PL.
This algorithm omits individuals with survey non-responses.

Algorithm

```
foreach x in 60 61 62 63 64 65 66 67 68 69 70 {;
  recode ple00`x' (-1 -2 -3 -4 -5 -6 -8=0);
 };

gen ple0060x = ple0060 + ple0061 + ple0062 + ple0063 + ple0064 + ple0065 +
                ple0066 + ple0067 + ple0068 + ple0069 + ple0070;

gen m11127=-2;
replace m11127=(ple0060x*4) if (ple0060x>= 1 & ple0060x<.);
replace m11127=(ple0072 *4) if (ple0072 >= 1 & ple0072 <.);
replace m11127= 0 if ple0060x==0 & inlist(syear,1984,1985,1986,1987,1994);
replace m11127= 0 if ple0073==1 | ple0072==-2;
replace m11127=-1 if inlist(ple0072,-1,-3) | inlist(ple0073,-1,-3);
replace m11127=-5 if (ple0072==-5) | (ple0073==-5);
```

Variable Name	P11101$$
Variable Label	Overall life satisfaction
Unit of Observation	Individual
Description	This variable indicates the satisfaction with life in general at the time of the survey for all individuals in the household 16 years of age and older.
Method	Individuals are asked to report how satisfied they are with their life in general on a scale of 0 to 10, in which 0 means completely dissatisfied and 10 means completely satisfied.
Format	-2 = N/A - Child -1 = Item non-response 0 = completely dissatisfied, ….., 10 = completely satisfied The original survey variables provided below can be found in the file PL and YOUTHL. This algorithm omits individuals with survey non-responses.

Algorithm	gen p11101=-2;
	replace p11101= ylh0079 if ylh0079>=0 & ylh0079<.;
	replace p11101=plh0182 if plh0182>=0 & plh0182<.;
	replace p11101=-1 if inlist(plh0182,-1,-3) | inlist(ylh0079,-1,-3);
	replace p11101=-5 if plh0182==-5 | ylh0079==-5;

Variable Name W11101$$

Variable Label Individuals Cross-sectional Weight – without 1st wave of a subsample

Unit of Observation Individual

Description Indicates the individual's population and sample weight. The individual weight provides a time-series consistent information, which might be used for analyses of income and income inequality over time. Given the selectivity built in the answering behavior of first-time respondents with respect to income questions (showing a significant higher share of item-non response which is especially true for a first wave of a new sub-sample), this weighting factor excludes every first wave of a new sub-sample of the SOEP. If all sub-samples will be used, the appropriate variable is W11105$$.

Method Individual weights to compensate for unequal probabilities of selection and sample attrition are necessary to obtain populations based statistics. The individual weights also encompass population weights.

Format The value of this variable ranges from 0 to 80.000.

The original survey variables provided below can be found in the file PHRF.
This algorithm omits individuals with survey non-responses.

Algorithm W11101$$ = Yphrf

1998 W11101$$ = Ophrfad
2000 W11101$$ = Qphrfae
2002 W11101$$ = Sphrfaf
2006 W11101$$ = Wphrfag
2010 W11101$$ = BAphrfah
2011 W11101$$ = BBphrfal2
2012 W11101$$ = BCphrfaj
2013 W11101$$ = BDphrfak
2015 W11101$$ = BFphrfam1
2016 W11101$$ = BGphrfam2
2017 W11101$$ = BHphrfam2
2018 W11101$$ = BIphrfan
2019 W11101$$ = BJphrfao
2020 W11101$$ = BKPHRFaq
2021 W11101$$ = BLPHRF
2022 W11101$$ = BMPHRFAM8
2023 W11101$$ = BNPHRFAR

Variable Name	W11102$$
Variable Label	Household Weight
Unit of Observation	Household
Description	Indicates the household's sample weight.
Method	Household weights to compensate for unequal probabilities of selection and sample attrition are necessary to obtain populations based statistics.
Format	The value of this variable ranges from 0 to 80.000. The original survey variables provided below can be found in the file HHRF. This algorithm omits individuals with survey non-responses.
Algorithm	W11102$$ = Yhhrf

Variable Name	W11103$$
Variable Label	Inverse staying probability – Respondent Individuals
Unit of Observation	Individual
Description	Indicates the individual's inverse staying probability to derive longitudinal weights.
Method	Longitudinal weights in the SOEP are constructed using inverse staying probabilities. The inverse staying probability is the inverse of the probability that an individual participated in the named year and can be used to generate longitudinal weights. To properly weight a balanced sample of individuals represented in five years of the survey (1986 through 1990), for example, create a longitudinal weight by multiplying the individual cross-sectional weight in 1986 by the inverse staying probabilities of the subsequent years 1987, 1988, 1989, and 1990. Example: longitudinal weight = W1110186*W1110387*W1110388*W1110389*W1110390 The created longitudinal weight should be used with any longitudinal sample.
Format	N/A The original survey variables provided below can be found in the file PHRF. This algorithm omits individuals with survey non-responses.
Algorithm	1984: N/A since 1985: W11103$$ = Ypbleib

Variable Name	W11104$$
Variable Label	Population Factor
Unit of Observation	Household
Description	This correction factor is already integrated into W11101$$ and is not repeated here.
Format	Data not available in SOEP

Variable Name	W11105$$
Variable Label	Individuals Cross-sectional Weight – all samples
Unit of Observation	Individual
Description	Indicates the individual's weight for all sub-samples of the SOEP.
Method	Individual weights to compensate for unequal probabilities of selection and sample attrition are necessary to obtain populations based statistics. These weights should be used when analyses include all sub-samples of the SOEP. For a more detailed discussion of weighting issues in the SOEP please see *Desktop Companion to the German Socio-Economic Panel Study (SOEP*).
Format	The value of this variable ranges from 0 to 80.000. The original survey variables provided below can be found in the file PHRF. This algorithm omits individuals with survey non-responses.
Algorithm	W11105$$ = $PHRF

Variable Name	Variable Label
W11107$$	Cross-sectional Weight – Enumerated Individuals
W11108$$	Longitudinal Weight – Enumerated Individuals
W11109$$	Population Factor for W11103$$
W11110$$	Population Factor for W11107$$
W11111$$	Population Factor for W11108$$

Algorithm Data not available in SOEP

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