

Grabka, Markus M.

**Research Report**

## SOEP-Core v35 - codebook for the \$PEQUIV File 1984-2018: CNEF variables with extended income information for the SOEP

SOEP Survey Papers, No. 772

**Provided in Cooperation with:**

German Institute for Economic Research (DIW Berlin)

*Suggested Citation:* Grabka, Markus M. (2020) : SOEP-Core v35 - codebook for the \$PEQUIV File 1984-2018: CNEF variables with extended income information for the SOEP, SOEP Survey Papers, No. 772, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin

This Version is available at:

<https://hdl.handle.net/10419/214236>

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SOEP – The German Socio-Economic Panel at DIW Berlin

2020

# SOEP-Core v35 – Codebook for the \$PEQUIV File 1984-2018: CNEF Variables with Extended Income Information for the SOEP

Markus M. Grabka

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Markus M. Grabka. 2020. SOEP-Core v35 – Codebook for the \$PEQUIV File 1984-2018: CNEF Variables with Extended Income Information for the SOEP. SOEP Survey Papers 772: Series D. Berlin: DIW/SOEP



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ISSN: 2193-5580 (online)

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# SOEP-Core v35 – Codebook for the \$PEQUIV File 1984-2018: CNEF Variables with Extended Income Information for the SOEP

Markus M. Grabka

## Preface

The \$PEQUIV-File is based on 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: Schmollers Jahrbuch (Journal of Applied Social Science Studies), 127(4), 627–654.

### General notes:

- In contrast to the original CNEF-data which is based on the 95% scientific use file of SOEP, the \$PEQUIV-files include the full 100%-sample.
- The 2017 release of the \$PEQUIV-files has been updated to include the 2017 data (wave BI).
- Population for \$PEQUIV 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, but without those with a \$NETTO-code of 19 as for those individuals no answer household questionnaire has been made).
- For longitudinal consistency, all \$PEQUIV income variables are consistently expressed in EURO (1 Euro = 1,95583 DM) independent of the currency used in the underlying survey instruments.
- 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) in 2016 (2017) as not all income information was collected for this sample in 2016 (2017).
- First time respondents of the sample M3, M4 and M5 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 \$PEQUIV-files have been extended to also cover all single income components considered in the aggregated annual income figures of the CNEF. In principle, these single income components correspond to the originally surveyed information (which is stored in the \$P, \$PKAL and \$H files) 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 (2010): Dealing with Incomplete Household Panel Data in Inequality Research. SOEP Papers on Multidisciplinary Panel Data Research at DIW Berlin, No. 290, Berlin (see: [http://www.diw.de/documents/publikationen/73/diw\\_01.c.354683.de/diw\\_sp0290.pdf](http://www.diw.de/documents/publikationen/73/diw_01.c.354683.de/diw_sp0290.pdf) forthcoming in *Sociological Methods and Research*) . 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 the 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 \$PEQUIV-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 BI = 18 / \$\$ =84, ... 18).

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\$\$.

For further information please contact: **Markus M. Grabka (mgrabka@diw.de)**.

## Variables in the cross-sectional \$PEQUIV Files

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Number HH members age 2-4	H11104\$\$	34
Number HH members age 4-7	H11104\$\$	34
Number HH members age 8-10	H11106\$\$	34
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Imputation flag: Social assistance for elderly	FSSOLD\$\$	
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Imputation flag: Losses from capital investment	FLOSSC\$\$	
Imputation flag: Additional child benefit	FADCHB\$\$	
Imputation flag: Child care subsidy	FCHSUB\$\$	
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Imputation flag: Advance child maintenance payment	FACHM\$\$	
Imputation flag: Child support, caregiver alimony	FCHSU\$\$	
Imputation flag: Divorce alimony, during separation	FSPOU\$\$	
Imputation flag: Private Transfers received	FELSE\$\$	
Imputation flag: Profit Withdrawal	FWITH\$\$	
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## Using the \$PEQUIV File Codebook

<b>Variable Name</b>	I11110\$\$	<i>Name of Variable in the \$PEQUIV-File</i>
<b>Variable Label</b>	Labor Earnings of Individual	
<b>Unit of Observation</b>	Individual / Household / Year	
<b>Period</b>	Annual	<i>Periodicity</i>
		<i>Description of Variable Content</i>
<b>Description</b>	This variable represents the labor earnings of each individual in the household.	
<b>Method</b>		<i>Description of Variable Creation</i>
	<p>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.</p> <p>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.</p>	
<b>Format</b>		<i>Variable Format in the \$PEQUIV-File</i>
	<p>Not formatted. This variable is in current year EURO.</p>	
<b>Algorithm</b>	$I11110\$ = IJOB1\$ + IJOB2\$ + ISELF\$ + IMILT\$ + I13LY\$ + I14LY\$ + IXMAS\$ + IHOLY\$ + IGRAY\$ + IOTHY\$$	

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

<b>Variable Name</b>	X11102\$\$
<b>Variable Label</b>	Household Identification Number
<b>Unit of Observation</b>	Household
<b>Description</b>	This variable links individuals to the households they were living in at the time of the interview. The SOEP provides yearly household identification numbers.
<b>Method</b>	Transcribed variable.
<b>Format</b>	N/A
	The original survey variables provided below can be found in the files HPFAD.
<b>Algorithm</b>	$X11102\$ = Y_{hhnr} \quad (Y = a, b, \dots)$

<b>Variable Name</b>	X11103\$\$
<b>Variable Label</b>	Individual in Household at Survey
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether an individual was living in the household at the time of the interview regardless of whether the individual responded to interview questions.
<b>Method</b>	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.
<b>Format</b>	0 = No 1 = Yes
	The original survey variables provided below can be found in the file HPFAD.
<b>Algorithm</b>	If Ynetto >= 10 & Ynetto < 40 and Yhnetto=1      then X11103\$\$ = 1 else X11103\$\$ = 0

<b>Variable Name</b>	X11104LL
<b>Variable Label</b>	Sub-sample Identifier
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates from which sub sample an individual in the SOEP is drawn.
<b>Method</b>	<p>The SOEP contains several different samples.</p> <ol style="list-style-type: none"> <li>(1) 'A 1984 Initial Sample (West)'</li> <li>(2) 'B 1984 Migration (until 1983, West)'</li> <li>(3) 'C 1990 Initial Sample (East)'</li> <li>(4) 'D 1994/5 Migration (1984-1994, West)'</li> <li>(5) 'E 1998 Refreshment'</li> <li>(6) 'F 2000 Refreshment'</li> <li>(7) 'G 2002 High Income'</li> <li>(8) 'H 2006 Refreshment'</li> <li>(9) 'I 2009 Innovation Sample'</li> <li>(10) 'J 2011 Refreshment'</li> <li>(11) 'K 2012 Refreshment'</li> <li>(12) 'L1 2010 Birth Cohort (2007-2010)'</li> <li>(13) 'L2 2010 Family Type (Low-Income, Single-Parent, Large Families)'</li> <li>(14) 'L3 2011 Family Type (Single-Parent, Large Families)'</li> <li>(15) 'M1 2013 Migration (1995-2011)'</li> <li>(16) 'M2 2015 Migration (2009-2013)'</li> <li>(17) 'M3 2016 Refugee (2013-2015)'</li> <li>(18) 'M4 2016 Refugee/family (2013-2015)'</li> <li>(19) 'M5 2017 Refugee (2013-2016)'</li> <li>(20) 'N 2017 Refreshment (PIAAC-L)'</li> <li>(21) 'O 2018 Refreshment (Social city)'</li> </ol>

The original survey variables provided below can be found in the file PPFAD.

**Algorithm** X11104LL = psample



<b>Variable Name</b>	X11105\$\$
<b>Variable Label</b>	Indicator of Whether Person in Household was Interviewed
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether an individual present in the household provided interview responses. Children in the household are counted as interviewed persons. All individuals in households, where the household questionnaire is missing (netto=19) are not part of the pequiv-population.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	If Ynetto >= 10 & Ynetto < 30 then X11105\$\$ = 1; else X11105\$\$ = 0;

<b>Variable Name</b>	D11101\$\$
<b>Variable Label</b>	Age of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates the age of the individual in years.
<b>Method</b>	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.
<b>Format</b>	-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.
<b>Algorithm</b>	D11101\$\$ = 19\$\$ - GEBJAHR            (\$\$=84-99) D11101\$\$ = 20\$\$ - GEBJAHR        (\$\$=00 ...)

<b>Variable Name</b>	D11102LL
<b>Variable Label</b>	Gender of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates the gender of the individual.
<b>Method</b>	<p>The SOEP records the gender (SEX) of each individual. This information is acquired once and is not obtained in subsequent years.</p> <p>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.</p>
<b>Format</b>	<p>-1 = Item non-response  1 = Male  2 = Female</p> <p>The original survey variables provided below can be found in the file PPFAD. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	D11102LL = SEX

<b>Variable Name</b>	D11103\$\$
<b>Variable Label</b>	Race of Household Head
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates the race of the interviewed head of household.
<b>Method</b>	<p>Race is <u>not</u> available in the SOEP.</p> <p>However, to separate Germans from non-Germans use the variables about</p> <ul style="list-style-type: none"> <li>○ nationality (NATION\$\$) which can be found in the \$PGEN-files or</li> <li>○ the information about whether a person was born in Germany (GERMBORN) or</li> <li>○ the country of origin (CORIGIN) whereas both can be found in the PPFAD-file.</li> </ul>
<b>Format</b>	-1 = no information available

<b>Variable Name</b>	D11104\$\$
<b>Variable Label</b>	Marital Status of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates the marital status in the current survey year of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	<p>-1 = N/A – Child / Item non-response  1 = Married / Living with a Partner  2 = Single  3 = Widowed  4 = Divorced  5 = Separated (Legally Married)</p> <p>The original survey variables provided below can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.</p> <p>Equivalent Data File Variable Definitions: D11101__ = Age of Individual</p>
<b>Algorithm</b>	<pre> 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 </pre>

<b>Variable Name</b>	D11105\$\$
<b>Variable Label</b>	Relationship to Household Head
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates the individual's relationship to the current survey year's head of household.
<b>Method</b>	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.
<b>Format</b>	-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 <code>_PBRUTTO</code> . 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;

```

<b>Variable Name</b>	D11106\$\$
<b>Variable Label</b>	Number of Persons in Household
<b>Unit of Observation</b>	Household
<b>Description</b>	Indicates the number of persons in the household at the time of the interview.
<b>Method</b>	This information is obtained from the household head or another household member who knows about the household's composition.
<b>Format</b>	-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.
<b>Algorithm</b>	D11106\$\$ = Yhhgr

<b>Variable Name</b>	D11107\$\$
<b>Variable Label</b>	Number of Children in Household
<b>Unit of Observation</b>	Household
<b>Description</b>	Indicates the number of persons in the household under age of 18 at the time of the interview.
<b>Method</b>	This variable is created by computing the number of individuals in the household under the age of 18.
<b>Format</b>	-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
<b>Algorithm</b>	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



<b>Variable Name</b>	D11108\$\$																										
<b>Variable Label</b>	Education With Respect to High School																										
<b>Unit of Observation</b>	Individual																										
<b>Description</b>	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.																										
<b>Method</b>	This variable is coded as follows: <table border="0" style="margin-left: 20px;"> <tr> <td style="padding-right: 10px;">Less than =</td> <td>Intermediate secondary school (Realschule)</td> </tr> <tr> <td style="padding-right: 10px;">High School</td> <td>Lower secondary school (Hauptschule)</td> </tr> <tr> <td></td> <td>Other</td> </tr> <tr> <td></td> <td>None</td> </tr> <tr> <td style="padding-right: 10px;">High School =</td> <td>Upper secondary school degree giving access to university studies (Abitur)</td> </tr> <tr> <td></td> <td>Certificate of aptitude for specialized short-course higher education (Fachhochschulreife)</td> </tr> <tr> <td></td> <td>Apprenticeship (Lehre)</td> </tr> <tr> <td></td> <td>Specialized vocational school (Berufsfachschule)</td> </tr> <tr> <td style="padding-right: 10px;">More than =</td> <td>School of health care (Schule des Gesundheitswesens)</td> </tr> <tr> <td style="padding-right: 10px;">High School</td> <td>Specialized college of higher education, post-secondary technical (Fachhochschule)</td> </tr> <tr> <td></td> <td>College</td> </tr> <tr> <td></td> <td>Technical university usually requiring practical training as part of the studies (Technische Universität)</td> </tr> <tr> <td></td> <td>Civil service training</td> </tr> </table>	Less than =	Intermediate secondary school (Realschule)	High School	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 =	School of health care (Schule des Gesundheitswesens)	High School	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
Less than =	Intermediate secondary school (Realschule)																										
High School	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 =	School of health care (Schule des Gesundheitswesens)																										
High School	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																										
<b>Format</b>	-1 = N/A – Child / Item non-response 1 = Less than High School 2 = High School 3 = More than High School <p>The original survey variables provided below can be found in the file _PGEN. This algorithm omits individuals with survey non-responses.</p> Equivalent Data File Variable Definitions: D11101__ = Age of Individual																										
<b>Algorithm</b>	<pre> 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; </pre>																										

<b>Variable Name</b>	D11109\$\$
<b>Variable Label</b>	Number of Years of Education
<b>Unit of Observation</b>	Individual
<b>Description</b>	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.
<b>Method</b>	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.
<b>Format</b>	-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.
<b>Algorithm</b>	if Ybilzeit=.B then D11109\$\$=0; else D11109\$\$ = Ybilzeit; else D11109\$\$=-1;

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

<b>Variable Name</b>	E11101\$\$
<b>Variable Label</b>	Annual Work Hours of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable reports annual hours worked in the previous year for all individuals in the household 16 years of age and older.
<b>Method</b>	<p>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).</p> <p>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.</p> <p>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.</p> <p>When the state indicated in the employment status variable does <u>not</u> 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.</p> <p>There are still some cases where no annual work hours but individual labor income (I1110\$\$) can be observed. This finding can be explained by e.g. individuals who took maternity leave or did National Service.</p>
<b>Format</b>	<p>-1 = N/A - Child  0 = Not employed in the previous year  The value of this variable ranges from 1 to 7457.</p> <p>The original survey variables provided below can be found in the file __P. This algorithm omits individuals with survey non-responses.</p> <p>Equivalent Data File Variable Definitions: D11101__ = Age of Individual</p>
<b>Algorithm</b>	<pre> if D11101\$\$ ge 16 then E11101\$\$=annual work hours imputation else E11101\$\$=0 if x11104LL=15 &amp; syear=2013 then E11101\$\$=-5 not collected for M1 in 2013 if x11104LL=16 &amp; syear=2015 then E11101\$\$=-5 not collected for M2 in 2015 if x11104LL=17,18 &amp; syear=2016 then E11101\$\$=-5 not collected for M3/4 in 2016 if x11104LL=19 &amp; syear=2017 then E11101\$\$=-5 not collected for M5 in 2017 </pre>

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

<b>Variable Name</b>	E11102\$\$
<b>Variable Label</b>	Employment Status of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates employment status in the previous year for all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	-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
<b>Algorithm</b>	<pre> 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=15 &amp; i=30 then E11102\$\$=-5 not collected for M1 in 2013 if x11104LL=16 &amp; i=32 then E11102\$\$=-5 not collected for M2 in 2015 if x11104LL=17/18 &amp; i=33 then E11102\$\$=-5 not collected for M3/4 in 2016 if x11104LL=19 &amp; i=34 then E11102\$\$=-5 not collected for M5 in 2017 </pre>

<b>Variable Name</b>	E11103\$\$
<b>Variable Label</b>	Employment Level of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	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.
<b>Method</b>	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
<b>Format</b>	-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
<b>Algorithm</b>	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=15 & i=30 then E11103\$\$=-5 not collect for M1 in 2013 if x11104LL=16 & i=32 then E11103\$\$=-5 not collect for M2 in 2015

<b>Variable Name</b>	E11104\$\$
<b>Variable Label</b>	Primary Activity of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates primary activity at the time of the survey for all individuals in the household 16 years of age and older.
<b>Method</b>	<p>This variable is based on the individual's self-reported employment status at the time of the interview.</p> <p>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.</p> <p>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.</p>
<b>Format</b>	<p>-1 = N/A – Child  -2 = Item-non response  1 = Working Now  2 = Not Working Now</p> <p>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</p>
<b>Algorithm</b>	
<b>1984-1990:</b>	<pre> 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 </pre> <p>(VAR=ap08, bp16, cp16, dp12, ep12, fp10, gp12, zp16, \$\$=84-90)</p>
<b>1991-1995:</b>	<pre> 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 </pre> <p>(VAR=hp15, ip15, jp15, kp25, lp21, \$\$=91-95)</p>
<b>since 1996:</b>	<pre> 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 </pre> <p>(VAR=mp15, np11, op09, pp10, qp10, rp12, sp15, tp34, up09, vp10, wp07, xp13, yp19, zp09, bap09, bbp09, bcp11, bdp18, bep12, bfp32, \$\$=96-...)</p>



<b>Variable Name</b>	E11105\$\$
<b>Variable Label</b>	Occupation of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates occupation at the time of the survey for all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	-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: <a href="http://www.ilo.org">http://www.ilo.org</a>  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
<b>Algorithm</b>	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;

<b>Variable Name</b>	E11106\$\$
<b>Variable Label</b>	1 Digit Industry of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	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.
<b>Method</b>	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.
<b>Format</b>	-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\$\$) 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$$ in (15,16,17,18,19,20,21,22,23,24,25,26,27,28,30,31,32,33,
      37,96,97,100) then E11106$$=4;
    if nace$$ in (29,34,35,36,45) then E11106$$=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\$\$). 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 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$$ in (29,30,33) then E11107$$=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$$ in (45) then E11107$$=14;
    if Nace$$ in (15,16) then E11107$$=13;
    if Nace$$ in (34,35,36) then E11107$$=15;
    if Nace$$ in (50,51,52) then E11107$$=16;
    if Nace$$ in (60,61,62,63,64) then E11107$$=21;
    if Nace$$ in (65) then E11107$$=22;

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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
```

<b>Variable Name</b>	<p>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</p>
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>These variables indicate the number of household members in the given age category living in the household at the time of the interview.</p> <p>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.</p>
<b>Method</b>	These variables are the simple count of all individuals in the household whose age is in the listed category.
<b>Format</b>	<p>The value of this variable ranges from 0 to 20.</p> <p>The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<pre> *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 &lt;= ak101{i} &lt; 14 then age14{i} = 1; if 14 &lt;= ak101{i} &lt; 19 then age15_18{i} = 1; chld018{i} = sum(age14{i},age15_18{i});  *** Code up indicators for McClements scale ***;; if 0 &lt;= ak101{i} &lt; 2 then age0_1{i} = 1; if 2 &lt;= ak101{i} &lt; 5 then age2_4{i} = 1; if 5 &lt;= ak101{i} &lt; 8 then age5_7{i} = 1; if 8 &lt;= ak101{i} &lt; 11 then age8_10{i} = 1; </pre>

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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$$)***

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

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

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

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<b>Equivalence scale</b>	<b>Other Equivalence Weights</b> (e.g. Square root of the Household size)
<b>Unit of Observation</b>	Household
<b>Description</b>	Household equivalence weight based upon a single international scale.
<b>Method</b>	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 (EI) 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.
<b>Algorithm</b>	$NEWVAR = D11106^{**}0.5$ ;



<b>Variable Name</b>	L11101\$\$
<b>Variable Label</b>	Federal State of Residence
<b>Unit of Observation</b>	Household
<b>Description</b>	This variable indicates the German federal state in which the household was located at the time of the survey
<b>Method</b>	N/A
<b>Format</b>	<p>-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</p> <p>These states can be collapsed into regions. From 1984 through 1989 three regions can be defined to include the following states:</p> <p><u>North</u>: Schleswig-Holstein (1), Hamburg (2), Lower-Saxony (3), Bremen (4), Berlin (11)  <u>South</u>: Hessen (6), Baden-Wuerttemberg (8), Bavaria (9)  <u>West</u>: North-Rhine-Westfalia (5), Rheinland-Pfalz (7), Saarland (10)</p> <p>From 1990 to present four regions can be defined to include the following states:  <u>North</u>: Schleswig-Holstein (1), Hamburg (2), Lower-Saxony (3), Bremen (4)  <u>South</u>: Hessen (6), Baden-Wuerttemberg (8), Bavaria (9)  <u>West</u>: North-Rhine-Westfalia (5), Rheinland-Pfalz (7), Saarland (10)  <u>East</u>: Berlin (11), Brandenburg (12) Mecklenburg-Vorpommern (13), Saxony (14), Saxony-Anhalt (15), Thuringen (16),</p> <p>This algorithm omits individuals with survey non-responses. Original variables below can be found in _HBRUTTO files</p>
<b>Algorithm</b>	L11101\$\$=Ybula

<b>Variable Name</b>	L11102\$\$
<b>Variable Label</b>	Region of Residence
<b>Unit of Observation</b>	Household
<b>Description</b>	This variable indicates whether the household was located in the former East or West Germany at the time of the survey
<b>Method</b>	N/A
<b>Format</b>	-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
<b>Algorithm</b>	L11102\$\$=1 (\$\$=84-90) L11102\$\$=Ysampreg (\$\$=90, ...)

<b>Variable Name</b>	Y11101\$\$
<b>Variable Label</b>	Consumer Price Index
<b>Unit of Observation</b>	Year
<b>Description</b>	This variable provides consumer price indices necessary to convert current Euro amounts into constant Euro amounts. The base income year is 2015 (survey year 2016).
<b>Method</b>	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: $I1110385 * (Y1110192/Y1110185)$
<b>Format</b>	N/A

<b>Price Index for West German States</b>	<b>Price Index for East German States</b>
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1984:	Y1110184 = 57.9	N/A
1985:	Y1110185 = 59.3	N/A
1986:	Y1110186 = 60.6	N/A
1987:	Y1110187 = 60.5	N/A
1988:	Y1110188 = 60.6	N/A
1989:	Y1110189 = 61.4	N/A
1990:	Y1110190 = 63.1	N/A
1991:	Y1110191 = 64.8	N/A
1992:	Y1110192 = 67.2	Y1110192 = 57.0
1993:	Y1110193 = 69.8	Y1110193 = 64.6
1994:	Y1110194 = 72.3	Y1110194 = 71.5
1995:	Y1110195 = 74.3	Y1110195 = 74.1
1996:	Y1110196 = 75.5	Y1110196 = 75.5
1997:	Y1110197 = 76.5	Y1110197 = 76.9
1998:	Y1110198 = 77.9	Y1110198 = 78.7
1999:	Y1110199 = 78.6	Y1110199 = 79.5
2000:	Y1110100 = 79.1	Y1110100 = 79.8

**Price Index for German States**

2001:	Y1110101 = 79.9
2002:	Y1110102 = 81.5
2003:	Y1110103 = 82.6
2004:	Y1110104 = 83.5
2005:	Y1110105 = 84.9
2006:	Y1110106 = 86.2
2007:	Y1110107 = 87.6
2008:	Y1110108 = 89.6
2009:	Y1110109 = 91.9
2010:	Y1110110 = 92.2
2011:	Y1110111 = 93.3
2012:	Y1110112 = 95.2
2013:	Y1110113 = 97.1
2014:	Y1110114 = 98.5
2015:	Y1110115 = 99.5
2016:	Y1110116 = 100.0
2017:	Y1110117 = 100,5
2018:	Y1110118 = 102.0

<b>Variable Name</b>	I11101\$\$
<b>Variable Label</b>	Household Pre-Government Income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined income before taxes and government transfers of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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
<b>Algorithm</b>	$I11101\$ = I11103\$ + I11104\$ + I11106\$ + I11117\$$

<b>Variable Name</b>	I11102\$\$
<b>Variable Label</b>	Household Post-Government Income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined income after taxes and government transfers in the previous year of all individuals in the household.
<b>Method</b>	<p>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).</p> <p>Household post-government income has no negative values.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.</p> <p>This algorithm omits individuals with survey non-responses.</p> <p>Equivalent Data File Variable Definitions:</p> <ul style="list-style-type: none"> <li>I11103__ = Household Labor Earnings</li> <li>I11104__ = Household Asset Income</li> <li>I11106__ = Household Private Transfers</li> <li>I11107__ = Household Public Transfers</li> <li>I11108__ = Household Social Security Pensions</li> <li>I11109__ = Total Household Taxes</li> <li>I11117__ = Household Private Retirement Income</li> </ul>
<b>Algorithm</b>	$I11102\$\$ = I11103\$\$ + I11104\$\$ + I11106\$\$ + I11107\$\$ + I11108\$\$ + I11117\$\$ - I11109\$\$$

<b>Variable Name</b>	I11103\$\$
<b>Variable Label</b>	Household Labor Income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined labor income of all individuals in the household 16 years of age and older.
<b>Method</b>	<p>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.</p> <p>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.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.</p> <p>This algorithm omits individuals with survey non-responses.</p> <p>Equivalent Data File Variable Definitions: I11110__ = Individual Labor Earnings</p>
<b>Algorithm</b>	I11103\$\$ = sum of I11110\$\$ over all individuals in the household

<b>Variable Name</b>	I11104\$\$
<b>Variable Label</b>	Household Asset Income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household asset income reported by the head of the household.
<b>Method</b>	<p>Asset flows include income from interest, dividends, and rent.</p> <p>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:</p> <ul style="list-style-type: none"> <li>under 500 DM</li> <li>500 to 2,000 DM</li> <li>2,000 to 5,000 DM</li> <li>5,000 to 10,000 DM</li> <li>10,000 DM and over</li> </ul> <p>Starting in year 2001 (wave R) an additional item was offered:</p> <ul style="list-style-type: none"> <li>10,000 to 20,000 DM</li> <li>20,000 DM and over</li> </ul> <p>Since year 2002 (wave S) all items are asked for Euro:</p> <ul style="list-style-type: none"> <li>under 250 Euro</li> <li>250 to 1,000 Euro</li> <li>1,000 to 2,500 Euro</li> <li>2,500 to 5,000 Euro</li> <li>5,000 to 10,000 Euro</li> <li>10,000 Euro and over</li> </ul> <p>These respondents are assigned an interest and dividend amount based on uniformly distributed random numbers within their income range.</p> <p>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.</p> <p>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.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999.</p> <p>This variable is in current year EURO.</p> <p>The survey variables provided below are part of the \$PEQUIV-file. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	$I11104\$ = (RENTY\$ - OPERY\$) + DIVDY\$$

<b>Variable Name</b>	I11105\$\$
<b>Variable Label</b>	Household Imputed Rental Value
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the imputed rental value of owner occupied housing and for renters with below markets rent.
<b>Method</b>	<p>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).</p> <p>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 <u>and</u> 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.</p> <p>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<sup>2</sup> per month is used for West Germany in 1988 and rises to 5.52 DM/m<sup>2</sup> per month in 1998. The average interest burden in East Germany was slightly lower, at 4.14 DM/m<sup>2</sup> per month in 1998.</p> <p>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.</p> <p>For further details see: Frick and Grabka (2001) and Frick and Grabka (2003):</p>
<b>Format</b>	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.
<b>Algorithm</b>	N/a



<b>Variable Name</b>	I11106\$\$
<b>Variable Label</b>	Household Private Transfers
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined private transfers of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	$I11106\$ = \text{sum of } (I\text{ALM}\$ + I\text{ACHM}\$ + I\text{CHSU}\$ + I\text{SPOU}\$ + I\text{ELSE}\$)$ over all individuals in the household

<b>Variable Name</b>	I11107\$\$
<b>Variable Label</b>	Household Public Transfers
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined public transfers of all individuals in the household 16 years of age and older.
<b>Method</b>	<p>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 and unemployment benefit II.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.</p> <p>The survey variables provided below are part of the \$PEQUIV-file. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	$I11107\$ = [\text{sum of } (IUNBY\$ + IUNAY\$ + ISUBY\$ + IERET\$ + IMATY\$ + ISTUY\$) \text{ over all individuals in the household}] + HOUSE\$ + CHSPT\$ + NURSH\$ + SUBST\$ + SPHLP\$ + HSUP\$ + SSOLD\$ + ALG2\$ + ADCHB\$ + CHSUB\$ + EDUPAC\$ + ASYL\$$
<b>2010:</b>	$I11107\$ = I11107\$ + 2500 \text{ if } bah7101c=1$

<b>Variable Name</b>	I11108\$\$
<b>Variable Label</b>	Household Social Security Pensions
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined social security pensions of all individuals in the household 16 years of age and older.
<b>Method</b>	<p>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).</p> <p>In 1993 through 1994 pension income from East German pensions (\$p7902o and \$p7912o) is assigned to other pension income.</p> <p>In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka &amp; Groh-Samberg (2010).</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.</p> <p>The survey variables provided below are part of the \$PEQUIV-file. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	
<b>1984-1985:</b>	$I11108\$ = \text{sum of } (IOLDY\$ + IWIDY\$ + ICOMP\$ + IPRVP\$) \text{ over all individuals in the household}$
<b>2002:</b>	$I11108\$ = \text{sum of } (IOLDY\$ + IWIDY\$) \text{ over all individuals in the household}$
<b>1986-2001, 2003-2015:</b>	$I11108\$ = \text{sum of } (igrv1\$ + igrv2\$ + ismp1\$ + ismp2\$ + iciv1\$ + iciv2\$ + iwar1\$ + iwar2\$ + iagr1\$ + iagr2\$ + iguv1\$ + iguv2\$) \text{ over all individuals in a household } (\$ = 86-01,03, \dots, 15)$
<b>2016, 2017</b>	$I11108\$ = \text{sum of } (igrv1\$ + igrv2\$ + ismp1\$ + ismp2\$ + iciv1\$ + iciv2\$ + iwar1\$ + iwar2\$ + iagr1\$ + iagr2\$ + iguv1\$ + iguv2\$) \text{ over all individuals in a household } (\$ = 16, 17)$
<b>since 2018</b>	$I11108\$ = \text{sum of } (igrv1\$ + igrv2\$ + ismp1\$ + ismp2\$ + iciv1\$ + iciv2\$ + iwar1\$ + iwar2\$ + iagr1\$ + iagr2\$ + iguv1\$ + iguv2\$ + ilib1\$ + ilib2\$) \text{ over all individuals in a household } (\$ = 18, \dots)$

<b>Variable Name</b>	I11109\$\$
<b>Variable Label</b>	Total Household Taxes
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable includes income taxes and payroll taxes (e.g. health, unemployment, nursing home and retirement insurance taxes) of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	$I11109\$ = I11111\$ + I11112\$$

<b>Variable Name</b>	I11110\$\$
<b>Variable Label</b>	Individual Labor Earnings
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents the labor earnings of individuals in the household 16 years of age and older.
<b>Method</b>	<p>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.</p> <p>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.</p> <p>In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka &amp; Groh-Samberg (2010).</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999.  This variable is in current year EURO.</p> <p>The survey variables provided below are part of the \$PEQUIV-file.  This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	
1984-2015	$I11110\$ = IJOB1\$ + IJOB2\$ + ISELF\$ + IMILT\$ + I13LY\$ + I14LY\$ + IXMAS\$ + IHOLY\$ + IGRAY\$ + IOTHY\$ + IDEMY\$ + ITRAY\$$
Since 2016	$I11110\$ = IJOB1\$ + IJOB2\$ + ISELF\$ + IMILT\$ + I13LY\$ + I14LY\$ + IXMAS\$ + IHOLY\$ + IGRAY\$ + IOTHY\$ + IDEMY\$ + ITRAY\$ + IWITH\$$

<b>Variable Name</b>	I11111\$\$
<b>Variable Label</b>	Household Federal Taxes
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable includes federal income taxes of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.
<b>Algorithm</b>	N/a

<b>Variable Name</b>	I11112\$\$
<b>Variable Label</b>	Household Social Security Taxes
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable includes social security taxes (payroll taxes) of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	The value of this variable ranges from 0 to 9,999,999. This variable is in current year EURO.
<b>Algorithm</b>	N/a

<b>Variable Name</b>	I11113\$\$	Household Post-Government Income (TAXSIM)
	I11114\$\$	Total Household Taxes (TAXSIM)
	I11115\$\$	Household State Taxes (TAXSIM)
	I11116\$\$	Household Federal Taxes (TAXSIM)
<b>Unit of Observation</b>	Household	
<b>Description</b>	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.	
<b>Method</b>	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.	
<b>Format</b>	N/A	
<b>Algorithm</b>	N/a	



<b>Variable Name</b>	I11117\$\$
<b>Variable Label</b>	Household Private Retirement Income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the combined retirement income from private sources of all individuals in the household 16 years of age and older.
<b>Method</b>	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\$\$.
<b>Format</b>	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.
<b>Algorithm</b>	
<b>1984-1985:</b>	N/a
<b>2002-2003:</b>	I11117\$\$ = sum of (ICOMP\$\$ + IPRVP\$\$) over all individuals in the household (\$\$= 02-03)
<b>1986-2001, 2004-2014:</b>	I11117\$\$ = sum of (ivbl1\$\$ + ivbl2\$\$ + icom1\$\$ + icom2\$\$ + iprv1\$\$ + iprv2\$\$ + ison1\$\$ + ison2\$\$) over all individuals in the household (\$\$= 86-01, 04,-14)
<b>2015-2016:</b>	I11117\$\$ = sum of (ivbl1\$\$ + ivbl2\$\$ + icom1\$\$ + icom2\$\$ + iprv1\$\$ + iprv2\$\$ + ison1\$\$ + ison2\$\$ + irie1\$\$ + irie2\$\$) over all individuals in the household (\$\$= 15,...)
<b>2017-:</b>	I11117\$\$ = sum of (ivbl1\$\$ + ivbl2\$\$ + icom1\$\$ + icom2\$\$ + iprv1\$\$ + iprv2\$\$ + ison1\$\$ + ison2\$\$ + irie1\$\$ + irie2\$\$ + iaus1\$\$ + iaus2\$\$) over all individuals in the household

<b>Variable Name</b>	I11118\$\$
<b>Variable Label</b>	Household Windfall Income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the amount of total household windfall income of all individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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	Wwind=BHH_50 + BHH_52 + BHH_54
2018	Wwind=BIH_50 + BIH_52 + BIH_54

<b>Variable Name</b>	I11201\$\$
<b>Variable Label</b>	Share of imputed Household Pre-Government Income
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for Household Pre-Government Income (I11101\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <ul style="list-style-type: none"> <li>-1 = no answer or do not know</li> <li>-2 = does not apply</li> <li>-3 = original value was deleted because it was found to be implausible</li> </ul> <p>The imputation procedures was used to fill in missing values represented by -1 and -3 only.</p>
<b>Format</b>	<p>0 = Not Imputed 1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11201\$\$= percentage share of income that has been imputed for I11101\$\$

<b>Variable Name</b>	I11202\$\$
<b>Variable Label</b>	Share of imputed Household Post-Government Income
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household post-government income (I11102\$\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-1 = no answer or do not know  -2 = does not apply  -3 = original value was deleted because it was found to be implausible</p> <p>The imputation procedures was used to fill in missing values represented by -1 and -3 only.</p>
<b>Format</b>	<p>0 = Not Imputed  1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11202\$\$= percentage share of income that has been imputed for I11102\$\$

<b>Variable Name</b>	I11203\$\$
<b>Variable Label</b>	Share of imputed Household Labor Income
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household labor income (I11103\$\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <ul style="list-style-type: none"> <li>-1 = no answer or do not know</li> <li>-2 = does not apply</li> <li>-3 = original value was deleted because it was found to be implausible</li> </ul> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed 1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11203\$\$= percentage share of income that has been imputed for I11103\$\$

<b>Variable Name</b>	I11204\$\$
<b>Variable Label</b>	Share of imputed Household Asset Income
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household asset income (I11104\$\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-1 = no answer or do not know  -2 = does not apply  -3 = original value was deleted because it was found to be implausible</p> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed  1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p> <p>Equivalent Data File Variable Definitions: I11104__ = Household Asset Income</p>
<b>Algorithm</b>	I11204\$\$= percentage share of income that has been imputed for I11104\$\$

<b>Variable Name</b>	I11205\$\$
<b>Variable Label</b>	Impute Household Imputed Rental Value
<b>Unit of Observation</b>	Household
<b>Description</b>	This variable indicates if the imputed rental value (I11105\$\$) has been imputed.
<b>Method</b>	Household imputed rental value is fully simulated in the SOEP. Thus this variable indicates if household Imputed rental Value has been simulated and takes a value of 0 otherwise. For further details see: Frick and Grabka (2001) and Frick and Grabka (2003).
<b>Format</b>	0 = Not Imputed 1 = Fully Imputed  This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	$I11205\$ = 1$ if $I11105\$ > 0$ , else $I11205\$ = 0$ .

<b>Variable Name</b>	I11206\$\$
<b>Variable Label</b>	Share of imputed Household Private Transfers
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household private transfers (I11106\$\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <ul style="list-style-type: none"> <li>-1 = no answer or do not know</li> <li>-2 = does not apply</li> <li>-3 = original value was deleted because it was found to be implausible</li> </ul> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed 1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11206\$\$= percentage share of income that has been imputed for I11106\$\$



<b>Variable Name</b>	I11207\$\$
<b>Variable Label</b>	Share of imputed Household Public Transfers
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household public transfers (I11107\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <ul style="list-style-type: none"> <li>-1 = no answer or do not know</li> <li>-2 = does not apply</li> <li>-3 = original value was deleted because it was found to be implausible</li> </ul> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed 1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11207\$\$= percentage share of income that has been imputed for I11107\$\$

<b>Variable Name</b>	I11208\$\$
<b>Variable Label</b>	Share of imputed Household Social Security Pensions
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household social security pensions (I11108\$\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-1 = no answer or do not know  -2 = does not apply  -3 = original value was deleted because it was found to be implausible</p> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed  1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11208\$\$= percentage share of income that has been imputed for I11108\$\$

<b>Variable Name</b>	I11209\$\$
<b>Variable Label</b>	Impute Total Household Taxes
<b>Unit of Observation</b>	Household
<b>Description</b>	Total household taxes are fully simulated in the SOEP. Thus this variable indicates if total household taxes has been simulated and takes a value of 0 otherwise.
<b>Format</b>	0 = Not Imputed 1 = Fully Imputed  This algorithm omits individuals with survey non-responses.  Equivalent Data File Variable Definitions: I11109__ = Total Household Taxes
<b>Algorithm</b>	$I11209\$\$ = 1 \text{ if } I11109\$\$ > 0, \text{ else } I11209\$\$ = 0.$

<b>Variable Name</b>	I11210\$\$
<b>Variable Label</b>	Share of imputed Individual Labor Earnings
<b>Unit of Observation</b>	Individual
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for individual labor earnings (I11110\$\$).</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-1 = no answer or do not know  -2 = does not apply  -3 = original value was deleted because it was found to be implausible</p> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed  1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11210\$\$= percentage share of income that has been imputed for I11110\$\$

<b>Variable Name</b>	I11217\$\$
<b>Variable Label</b>	Share of imputed Household Private Retirement Income
<b>Unit of Observation</b>	Household
<b>Description</b>	<p>This variable indicates the percentage share of income that has been imputed for household private retirement income (I11117\$\$).</p> <p>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)</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-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</p> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed  1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	I11217\$\$= percentage share of income that has been imputed for I11117\$\$

<b>Variable Name</b>	I11218\$\$
<b>Variable Label</b>	Impute Household Windfall Income
<b>Unit of Observation</b>	Household
<b>Description</b>	This variable indicates if windfall income (I1118\$\$) 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)
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-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</p> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed  1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	N/a

<b>Variable Name</b>	RENTY\$\$
<b>Variable Label</b>	Income from rental and leasing
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents the household income from rental and leasing in the last year.</p> <p>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.</p>
<b>Method</b>	Transcribed variable.
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.</p>

#### 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
*** 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 xbg46
             xbbh_39 xbih_39
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;

```

<b>Variable Name</b>	OPERY\$\$
<b>Variable Label</b>	Operation, maintenance costs
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents the household operation and maintenance costs in the last year.</p> <p>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.</p>
<b>Method</b>	Transcribed variable.
<b>Format</b>	<p>The value of this variable ranges from 0 to 9,999,999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _H. This algorithm omits individuals with survey non-responses.</p>

#### 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
*** 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 xbg48
               xbhh_41 xbih_41
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;
end;

```



<b>Variable Name</b>	DIVDY\$\$
<b>Variable Label</b>	Interest, dividend income
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from interest and dividends in the last year.
<b>Method</b>	<p>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:</p> <ul style="list-style-type: none"> <li>under 500 DM</li> <li>500 to 2,000 DM</li> <li>2,000 to 5,000 DM</li> <li>5,000 to 10,000 DM</li> <li>10,000 DM and over</li> </ul> <p>Starting in year 2001 (wave R) an additional item was offered:</p> <ul style="list-style-type: none"> <li>10,000 to 20,000 DM</li> <li>20,000 DM and over</li> </ul> <p>Since year 2002 (wave S) all items are asked for Euro:</p> <ul style="list-style-type: none"> <li>under 250 Euro</li> <li>250 to 1,000 Euro</li> <li>1,000 to 2,500 Euro</li> <li>2,500 to 5,000 Euro</li> <li>5,000 to 10,000 Euro</li> <li>10,000 Euro and over</li> </ul> <p>These respondents are assigned an interest and dividend amount based on uniformly distributed random numbers within their income range.</p>
<b>Format</b>	<p>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.</p>
<b>Algorithm</b>	<pre> 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 *** 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 xbbh_57_01 xbih_57_01  array cx103{*} temp\$\$; array cx104{*} divdy\$\$;  if ah45=.B then ah45=0; do i = 1 to dim(netto); cx103{i}=.; if netto{i} &gt;= 10 &amp; &lt; 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; </pre>

<b>Variable Name</b>	CHSPT\$\$
<b>Variable Label</b>	Child allowance
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from child allowances in the last year.
<b>Method</b>	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.
<b>Format</b>	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
*** 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 xbbh_59_03 xbih_59_03
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
array dp104{*} temp$$;
array dp106{*} out out out out out out out out out out out out out out out out
sh4602 th4502 uh4502 vh4802 wh4802 xh4802 yh4902 zh4902 bah4902
bbh4902 bch4902 bdh4902 beh5202 bfh4802 bgh6602 bhh_60_02 bih_60_02
array dp105{*} chspt$$;

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;

```

<b>Variable Name</b>	HOUSE\$\$
<b>Variable Label</b>	Housing allowance
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from housing allowance in the last year.
<b>Method</b>	Housing allowance is the product of the number of months that benefit was claimed in the previous year and the average amount per month.
<b>Format</b>	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
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 bhh_59_24
*** 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 xbgf6624
xbhh_59_24 xbbh_59_24
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;

```

<b>Variable Name</b>	NURSH\$\$
<b>Variable Label</b>	Nursing allowances
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	Nursing allowances is the product of the number of months that benefit was claimed in the previous year and the average amount per month.
<b>Format</b>	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.
<b>Algorithm</b>	<p>1984-2000 : N/a since 2001:</p> <pre> array dzc101{ *} rh4609 sh4609 th4509 uh4509 vh4809 wh4812 xh4812 yh4912 zh4915                 bah4912 bbh4912 bch4912 bdh4912 beh5215 bfh4824 bgh6615 bhh_59_15                 bih_59_15 *** imputed values due to item-non response *** array dzc102{ *} xrh4609 xsh4609 xth4509 xuh4509 xv4809 xwh4812 xxh4812 xyh4912                 xzh4915 xbah4912 xbbh4912 xbch4912 xbdh4912 xbeh5215 xbfh4814                 xbgh6615 bhh_59_14 bih_59_14 array dzc103{ *} rh4608 sh4608 th4508 uh4508 vh4808 wh4811 xh4811 yh4911 zh4914                 bah4911 bbh4911 bch4911 bdh4911 beh5214 bfh4823 bgh6614 xbbh_59_15                 xbih_59_15 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; </pre>

<b>Variable Name</b>	SUBST\$\$
<b>Variable Label</b>	Social assistance
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from social assistance in the last year.
<b>Method</b>	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 <u>and</u> 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.
<b>Format</b>	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.
<b>Algorithm</b>	

```

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
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
*** 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 xbbh_59_18 xbih_59_18
*** imputed values due to lacking information in the questionnaire ***
array dt104{*} out out out out out out out out soz92 soz93 soz94 socast95 socast96
socast97 socast98 socast99 socast00 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;

```

<b>Variable Name</b>	SPHLP\$\$
<b>Variable Label</b>	Social assistance for special circumstances
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from Social assistance for special circumstances in the last year.
<b>Method</b>	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.
<b>Format</b>	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
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;

```

<b>Variable Name</b>	SSOLD\$\$
<b>Variable Label</b>	Social assistance for elderly (Grundsicherung im Alter)
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from Social assistance for elderly in the last year.
<b>Method</b>	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).
<b>Format</b>	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
array dy102{*} vh4906 wh4906 xh4906 yh5006 zh5006 bah4918 bbh4918 bch4918 bdh4918
                beh5221 bfh4834 bgh6621 bhh_59_21 bih_59_21
array dy103{*} xv4906 xwh4906 xxh4906 xyh5006 xzh5006 xbah4918 xbbh4918 xbch4918 x
                xbdh4918 xbeh5221 x bfh4834 x bgh6621 x bhh_59_21 x bih_59_21
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;

```

<b>Variable Name</b>	ALG2\$\$
<b>Variable Label</b>	Unemployment benefit II
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from unemployment benefit II including social benefit in the last year.
<b>Method</b>	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).
<b>Format</b>	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
array ey102{*} wh4806 xh4806 yh4906 zh4909 bah4909 bbh4909 bch4909 bdh4909 beh5212
                bfh4819 bgh6612 bhh_59_12 bih_59_12
array ey103{*} xwh4806 xxh4806 xyh4906 xzh4909 xbah4909 xbbh4909 xbch4909 xbdh4909
                xbeh5212 x bfh4819 xbgh6612 xbhh_59_12 xbih_59_12
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;

```



<b>Variable Name</b>	HSUP\$\$
<b>Variable Label</b>	Housing support for owner-occupiers
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from direct housing support for owner-occupiers in the last year.
<b>Method</b>	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.
<b>Format</b>	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
*** 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
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;

```

<b>Variable Name</b>	LOSSR\$\$
<b>Variable Label</b>	Losses from renting and leasing
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household tax deductible costs or losses from renting and leasing incurred in the last.
<b>Method</b>	Transcribed variable. It was asked the first time in wave V (variable vh4002 in SOEP file VH).
<b>Format</b>	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
array cw102{*} xvh4002 xwh4002 xxh4002 xyh4102 xzh4102 xbah4102 xbbh4102 xbch4102
                xbdh4102 xbeh4402 xbfh4002 xbg52 xbbh_45 xbih_45
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;

```

<b>Variable Name</b>	LOSSC\$\$
<b>Variable Label</b>	Losses from capital investment
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household losses from capital investment in the last year.
<b>Method</b>	Transcribed variable. It was asked the first time in wave V (variable vh4409 in SOEP file VH).
<b>Format</b>	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
array cw202{*} xvh4409 xwh4409 xxh4409 xyh4509 xzh4509 xbah4509 xbbh4509 xbh4509
    xbdh4509 xbeh4809 xbfh4409 xbg6302 xbh_56_02 xbi_56_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} < 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;

```

<b>Variable Name</b>	ADCHB\$\$
<b>Variable Label</b>	Additional Child Benefit
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from additional child benefit in the last year.
<b>Method</b>	Transcribed variable. It was asked the first time in wave Z (variable ZH4906 in SOEP file ZH).
<b>Format</b>	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
array kp103{*} zh4905 bah4905 bbh4905 bch4905 bdh4905 beh5205 bfh4808 bgh6605
                bhh_59_05 bih_59_05
array kp104{*} xzh4906 xbah4906 xbbh4906 xbch4906 xbdh4906 xbeh5206 xbfh4806
                xbgh6606 xbbh_59_06 xbih_59_06
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;

```

<b>Variable Name</b>	CHSUB\$\$
<b>Variable Label</b>	Child care subsidy
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from child care subsidy in the last year. This information was asked in 2014-2016 only.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	<p>1984-2013, 2017-: N/a 2014-2016:</p> <pre> array f101{*} beh5208 bfh4813 bgh6608 array f102{*} beh5209 bfh4814 bgh6609 array f103{*} xbeh5209 xbfh4814 xbgh6609 array f104{*} temp1 array f105{*} temp2 array f106{*} chsub14;  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; </pre>

<b>Variable Name</b>	KIDY\$\$
<b>Variable Label</b>	Income of children
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	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).
<b>Format</b>	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.
<b>Algorithm</b>	1984-2015, 2017: N/a 2016:  <pre> 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'&gt;-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'&gt;=0 &amp; hnet1k`x'&lt;. ; }; </pre>

<b>Variable Name</b>	EDUPAC\$\$
<b>Variable Label</b>	Benefits from the educational package
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from benefits from the educational package. In 1984-2016 this information was not asked.
<b>Method</b>	Transcribed variable. It was asked the first time in wave BH (variable BHH_59_06 in SOEP file BHH).
<b>Format</b>	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
array g102{*} bhh_59_09 bih_59_09
array g103{*} xbhh_59_09 xbih_59_09
array g104{*} temp1$$
array g105{*} temp2$$
array g106{*} edupac$$

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}=.;
end;

```

<b>Variable Name</b>	ASYL\$\$
<b>Variable Label</b>	Asylum seeker benefit
<b>Unit of Observation</b>	Household
<b>Period</b>	Annual
<b>Description</b>	This variable represents the household income from asylum seekers benefits. In 1984-2016 this information was not asked.
<b>Method</b>	Transcribed variable. It was asked the first time in wave BH (variable BHH_71_q66 in SOEP file BHH).
<b>Format</b>	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.
<b>Algorithm</b>	1984-2016: N/a Since 2017:  <pre> array h101{*} bhh_70_q66 bih_73_q116 array h102{*} bhh_71_q66 bih_72_01_q116 array h103{*} xbhh_71_q66 xbih_72_01_q116 array h104{*} temp1\$\$ array h105{*} temp2\$\$ array h106{*} asyl\$\$  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; </pre>



<b>Variable Name</b>	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

**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.

<b>Variable Name</b>	IJOB1\$\$
<b>Variable Label</b>	Wages, Salary from main job
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents wages or salary from main job of individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	$IJOB1\$ = (\$P2A02 * \$P2A03)$

<b>Variable Name</b>	IJOB2\$\$
<b>Variable Label</b>	Income from secondary employment
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from secondary employment of individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	$IJOB2\$ = (\$P2C02 * \$P2C03)$

<b>Variable Name</b>	ISELF\$\$
<b>Variable Label</b>	Income from self-employment
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from self-employment of individuals in the household 16 years of age and older.
<b>Method</b>	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.
<b>Format</b>	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 <code>_PKAL</code> . This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	$ISELF\$ = (\$P2B02 * \$P2B03)$

<b>Variable Name</b>	IOLDY\$\$
<b>Variable Label</b>	Combined old-age, disability and civil servants pensions
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents income from combined old-age, disability and civil servants pensions of individuals in the household 16 years of age and older.</p> <p>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.</p>
<b>Method</b>	<p>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.</p> <p>If the information about the number of months is missing, the sample mean of that variable has been assigned.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _PKAL.</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	$IOLDY\$\$ = (\$P2D02 * \$P2D03)$

<b>Variable Name</b>	IWIDY\$\$
<b>Variable Label</b>	Combined widows and orphans pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents income from combined widows and orphans pension of individuals in the household 16 years of age and older.</p> <p>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.</p>
<b>Method</b>	<p>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.</p> <p>If the information about the number of months is missing, the sample mean of that variable has been assigned.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file <code>_PKAL</code>.</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	$IWIDY\$ = (\$P2E02 * \$P2E03)$

<b>Variable Name</b>	ICOMP\$\$
<b>Variable Label</b>	Combined company pension (surviving dependants c.p.)
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2001: N/a 2002-2003: $ICOMP\$ = (\$P2P02 * \$P2P03)$ ( $\$ = 02 - 03, \$ = S-T$ ) since 2004: N/a

<b>Variable Name</b>	IPRVP\$\$
<b>Variable Label</b>	Combined private pension (old-age, accident, disability)
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2001: N/a 2002-2003: $IPRVP\$ = (\$P2Q02 * \$P2Q03)$ ( $\$ = 02 - 03, \$ = S-T$ ) since 2004: N/a



<b>Variable Name</b>	IUNBY\$\$
<b>Variable Label</b>	Unemployment benefit
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from unemployment benefit of individuals in the household 16 years of age and older.
<b>Method</b>	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).
<b>Format</b>	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.
<b>Algorithm</b>	$IUNBY\$ = (\$P2F02 * \$P2F03)$

<b>Variable Name</b>	IUNAY\$\$
<b>Variable Label</b>	Unemployment assistance
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	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\$\$)
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2005:    IUNAY\$\$ = (\$P2G02 * \$P2G03) since 2006:    N/a

<b>Variable Name</b>	ISUBY\$\$
<b>Variable Label</b>	Subsistence allowance
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	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.
<b>Format</b>	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 <code>_PKAL</code> . This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	$ISUBY\$ = (\$P2H02 * \$P2H03)$ since 2015: N/a

<b>Variable Name</b>	IERET\$\$
<b>Variable Label</b>	Old-age transition benefit
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-1995: N/a 1996-2001: $IERET\$ = (\$P2I02 * \$P2I03)$ ( $\$ = 96 - 01, \$ = M, N, \dots, R$ ) since 2002: N/a

<b>Variable Name</b>	IMATY\$\$
<b>Variable Label</b>	Maternity benefit
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from maternity benefit of individuals in the household 16 years of age and older.
<b>Method</b>	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).
<b>Format</b>	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.
<b>Algorithm</b>	$IMATY\$\$ = (\$P2J02 * \$P2J03)$

<b>Variable Name</b>	ISTUY\$\$
<b>Variable Label</b>	Student grants
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from student grants of individuals in the household 16 years of age and older.
<b>Method</b>	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).
<b>Format</b>	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.
<b>Algorithm</b>	$ISTUY\$ = (\$P2K02 * \$P2K03)$

<b>Variable Name</b>	IMILT\$\$
<b>Variable Label</b>	Military community service pay
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-1995: N/a since 1996: $IMILT\$ = (\$P2L02 * \$P2L03)$ since 2015: N/a

<b>Variable Name</b>	IALIM\$\$
<b>Variable Label</b>	Alimony
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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\$\$.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2000: N/a 2001-2009: $IALIM\$ = (\$P2O02 * \$P2O03)$ since 2010: $IALIM\$ = (\$P2S02 * \$P2S03)$ since 2015: N/a



<b>Variable Name</b>	IACHM\$\$
<b>Variable Label</b>	Advance child maintenance payment
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2009: N/a since 2010: $IACHM\$ = (\$P2T02 * \$P2T03)$

<b>Variable Name</b>	ICHSU\$
<b>Variable Label</b>	Child support, caregiver alimony
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>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.</p> <p>In 2016 information about child support and spousal support are now integrated in one variable.</p>
<b>Method</b>	<p>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.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999. This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file <code>_PKAL</code>. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-2014: N/a  2015:            ICHSU\$\$ = (\$P2U02 * \$P2U03)  Since 2016      ICHSU\$\$ = (\$P2W02 * \$P2W03)</p>

<b>Variable Name</b>	ISPOU\$\$
<b>Variable Label</b>	Divorce alimony, during separation
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>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.</p> <p>Since 2016 this information is no longer collected as a single variable (see ICHSU\$).</p>
<b>Method</b>	<p>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.</p> <p>If the information about the number of months is missing, the sample mean of that variable has been assigned.</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _PKAL.</p> <p>This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-2014:    N/a</p> <p>2015:         ISPOU\$\$ = (\$P2V02 * \$P2V03)</p> <p>Since 2016:   N/a</p>

<b>Variable Name</b>	IELSE\$\$
<b>Variable Label</b>	Private Transfers received
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	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.
<b>Method</b>	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).
<b>Format</b>	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.
<b>Algorithm</b>	$IELSE\$ = (\$P2M02 * \$P2M03)$

<b>Variable Name</b>	IWITH\$\$
<b>Variable Label</b>	Profit Withdrawal
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from profit withdrawal of individuals in the household 16 years of age and older. In 1984-2015 specific questions related to this topic were not asked.
<b>Method</b>	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.
<b>Format</b>	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 <code>_PKAL</code> . This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	1984-2015: N/a 2016-2017: $IWITH\$ = (\$P2X02 * (\$P2X03))$ Since 2018: N/a

<b>Variable Name</b>	I13LY\$\$
<b>Variable Label</b>	13th monthly salary
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from 13th monthly salary of individuals in the household 16 years of age and older.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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 bhp_119_02 bip_120_02

<b>Variable Name</b>	I14LY\$\$
<b>Variable Label</b>	14th monthly salary
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from 14th monthly salary of individuals in the household 16 years of age and older.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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 bhp_119_04 bip_120_04

<b>Variable Name</b>	IXMAS\$\$
<b>Variable Label</b>	Christmas bonus
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from Christmas bonus of individuals in the household 16 years of age and older.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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 bhp_119_06 bip_120_06



<b>Variable Name</b>	IHOLY\$\$
<b>Variable Label</b>	Vacation bonus
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from vacation bonus of individuals in the household 16 years of age and older.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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 bhp_119_08 bip_120_08

<b>Variable Name</b>	IGRAY\$\$
<b>Variable Label</b>	Profit-sharing
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from profit sharing of individuals in the household 16 years of age and older.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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 bhp_119_10 bip_120_10

<b>Variable Name</b>	IOTHY\$\$
<b>Variable Label</b>	Other bonuses
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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).
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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 bhp_119_12 bip_120_12

<b>Variable Name</b>	ITRAY\$\$
<b>Variable Label</b>	Commuting expenses, travel grant
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	Transcribed variable.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	IDEMY\$\$
<b>Variable Label</b>	Indemnity payments
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2010-2013 this information was not asked in subsamples L1,L2,L3 and M1, in 2016 not in subsample M3/4.</p>
<b>Method</b>	Transcribed variable.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1990: N/a since 1991: IDEMY\$\$</p> <p>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</p>

<b>Variable Name</b>	IGRV1\$\$
<b>Variable Label</b>	Statutory pension insurance
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p>
<b>Method</b>	<p>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. In case of partial unit-non responding households this information has been imputed. For details see: Frick, Grabka &amp; Groh-Samberg (2010).</p>
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999. This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985: N/a  since 1986: <math>IGRV1\\$ = (\\$P2D02 * X)</math></p> <p>Statutory pension insurance variable list by survey year - each entry denoted in algorithm as X:</p> <p>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</p>

<b>Variable Name</b>	ISMP1\$\$
<b>Variable Label</b>	Social miners insurance pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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\$\$).
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	ICIV1\$\$
<b>Variable Label</b>	Civil servant pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985: N/a</p> <p>since 1986: <math>ICIV1\\$ = (\\$P2D02 * X)</math></p> <p>Civil servant pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>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</p>



<b>Variable Name</b>	IWAR1\$\$
<b>Variable Label</b>	War victim pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-1985, 2002, 2017, ...:           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

<b>Variable Name</b>	IAGR1\$\$
<b>Variable Label</b>	Farmer Pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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\$\$).
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	IGUV1\$\$
<b>Variable Label</b>	Statutory accident insurance pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985: N/a</p> <p>since 1986: <math>IGUV1\\$\\$ = (\\$P2D02 * X)</math></p> <p>Statutory accident insurance pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>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_07 bip_122_08</p>

<b>Variable Name</b>	IVBL1\$\$
<b>Variable Label</b>	Supplementary benefits for civil servants
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from supplementary benefits for civil servants 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.
<b>Method</b>	Income from supplementary benefits for civil servants is the product of the number of months that income was received in the previous year and the average amount per month.
<b>Format</b>	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.
<b>Algorithm</b>	1984-1985: N/a since 1986: $IVBL1\$ = (\$P2D02 * X)$  Supplementary benefits for civil servants 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

<b>Variable Name</b>	ICOM1\$\$
<b>Variable Label</b>	Company pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985: N/a</p> <p>since 1986: <math>ICOM1\\$ = (\\$P2D02 * X)</math></p> <p>Company pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>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</p>

<b>Variable Name</b>	IPRV1\$\$
<b>Variable Label</b>	Private pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-2002: N/a</p> <p>since 2003: <math>IPRV1\\$ = (\\$P2D02 * X)</math></p> <p>Private pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>tp9713 up8213 vp10313 wp8013 xp9713 yp9813 zp9409 bap8609 bbp9609 bcp8309 bdp10109 bep8809 bfp11711 bgp10311 bhp_121_06 bip_122_07</p>

<b>Variable Name</b>	IRIE1\$\$
<b>Variable Label</b>	Riester pension plan
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-2014: N/a</p> <p>since 2015: <math>IRIE11\\$\\$ = (\\$P2D02 * X)</math></p> <p>Riester pension plan variable list by survey year - each entry denoted in algorithm as X:</p> <p>bfp11709 bgp10309 bhp_121_05 bip_122_06</p>

<b>Variable Name</b>	IAUS1\$\$
<b>Variable Label</b>	Pensions from another country
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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



<b>Variable Name</b>	ILIB1\$\$
<b>Variable Label</b>	Pensions for liberal professions
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from pensions for liberal professions of individuals in the household 16 years of age and older. In 1984-2017 questions related to this topic were not asked.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2017: N/a since 2018: $ILIB1\$ = (\$P2D02 * X)$
	Pensions for liberal professions variable list by survey year - each entry denoted in algorithm as X:
	bip_122_05

<b>Variable Name</b>	ISON1\$\$
<b>Variable Label</b>	Other pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985: N/a</p> <p>since 1986: <math>ISON1\$\$ = (\\$P2D02 * X)</math></p> <p>Other pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>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</p>

<b>Variable Name</b>	IGRV2\$\$
<b>Variable Label</b>	Widows and orphans statutory pension insurance
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	ISMP2\$\$
<b>Variable Label</b>	Widows and orphans social miners insurance pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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\$\$).
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	ICIV2\$\$
<b>Variable Label</b>	Widows and orphans civil servant pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	IWAR2\$\$
<b>Variable Label</b>	Widows and orphans war victim pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file <code>_P</code> and <code>_PKAL</code>. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985, 2002, 2017, ...N/a</p> <p>1986-2001, 2003-2016: <math>IWAR2\\$ = (\\$P2E02 * X)</math></p> <p>Since 2017 N/a</p> <p>Widows and orphans war victim pension variable list by survey year - each entry denoted in algorithm as YWAR:</p> <p>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</p>

<b>Variable Name</b>	IAGR2\$\$
<b>Variable Label</b>	Widows and orphans farmer Pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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\$\$).
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	IGUV2\$\$
<b>Variable Label</b>	Widows and orphans statutory accident insurance
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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



<b>Variable Name</b>	IVBL2\$\$
<b>Variable Label</b>	Widows and orphans supplement. benefits for civil servants
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from widows and orphans supplementary benefits for civil servants 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.
<b>Method</b>	Income from widows and orphans supplementary benefits for civil servants is the product of the number of months that income was received in the previous year and the average amount per month.
<b>Format</b>	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.
<b>Algorithm</b>	1984-1985: N/a since 1986: $IVBL2\$ = (\$P2E02 * X)$  Widows and orphans supplementary benefits for civil servants 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

<b>Variable Name</b>	ICOM2\$\$
<b>Variable Label</b>	Widows and orphans company pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	IPRV2\$\$
<b>Variable Label</b>	Widows and orphans private pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-2002: N/a</p> <p>since 2003: <math>IPRV2\\$ = (\\$P2E02 * X)</math></p> <p>Widows and orphans private pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>tp9714 up8214 vp10314 wp8014 xp9714 yp9814 zp9410 bap8610 bbp8610 bcp8310 bdp10110 bep8810 bfp11712 bgp10320 bhp_121_17 bip_122_19</p>

<b>Variable Name</b>	IRIE2\$\$
<b>Variable Label</b>	Widows Riester pension plan
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	IAUS2\$\$
<b>Variable Label</b>	Widows / orphans pensions from another country
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents 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.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	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

<b>Variable Name</b>	ILIB2\$\$
<b>Variable Label</b>	Widow / orphans pensions for liberal professions
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	This variable represents income from widows / orphans pensions for liberal professions of individuals in the household 16 years of age and older. In 1984-2017 questions related to this topic were not asked.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	1984-2017: N/a since 2018: $ILIB2\$ = (\$P2E02 * X)$
	Widows / orphans pensions for liberal professions variable list by survey year - each entry denoted in algorithm as X:
	bip_122_17

<b>Variable Name</b>	ISON2\$\$
<b>Variable Label</b>	Other widows or orphans pension
<b>Unit of Observation</b>	Individual
<b>Period</b>	Annual
<b>Description</b>	<p>This variable represents 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.</p> <p>In 2016 this information was not asked in subsamples M3/4.</p>
<b>Method</b>	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.
<b>Format</b>	<p>The value of this variable ranges from 0 to 999.999.</p> <p>This variable is in current year EURO.</p> <p>The original survey variables provided below can be found in the file _P and _PKAL. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984-1985: N/a</p> <p>since 1986: <math>ISON2\$\$ = (\\$P2E02 * X)</math></p> <p>Other widows or orphans pension variable list by survey year - each entry denoted in algorithm as X:</p> <p>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</p>

<b>Variable Name</b>	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 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
<b>Variable Label</b>	Imputation flag: for respective income component
<b>Unit of Observation</b>	Individual
<b>Description</b>	<p>This variable indicates if income from the respective income component has been imputed.</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <p>-1 = no answer or do not know  -2 = does not apply  -3 = original value was deleted because it was found to be implausible</p> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	0 = Not Imputed 1 = Fully Imputed
	This algorithm omits individuals with survey non-responses.



<b>Variable Name</b>	FGRV1\$\$ / FGRV2\$\$
<b>Variable Label</b>	Imputation flag: statutory pension insurance / Imputation flag: widows or orphans statutory pension insurance
<b>Unit of Observation</b>	Individual
<b>Description</b>	<p>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 FGRV1\$\$ and FGRV2\$\$ encompasses also imputation of item-non-response on any of the considered variables related to (own) pension income.</p> <p>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).</p>
<b>Method</b>	<p>In the original SOEP data there are three types of missing values. These missing values can be interpreted as:</p> <ul style="list-style-type: none"> <li>-1 = no answer or do not know</li> <li>-2 = does not apply</li> <li>-3 = original value was deleted because it was found to be implausible</li> </ul> <p>The imputation procedures was used to fill in missing values represented by -1 (.A) and -3 (.C) only.</p>
<b>Format</b>	<p>0 = Not Imputed 1 = Fully Imputed</p> <p>This algorithm omits individuals with survey non-responses.</p>

<b>Variable Name</b>	M11101\$\$
<b>Variable Label</b>	Whether spent night in hospital in last year
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether person stayed overnight in a hospital at any time in previous year In 1990 and 1993 this information was not asked.
<b>Method</b>	Transcribed variable.
<b>Format</b>	-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 \_P.  
This algorithm omits individuals with survey non-responses.

### Algorithm

```

array hosp{*} ap5101 bp7201 cp7201 dp7201 ep6901 fp8501 null hp8001 ip8001 null
           kp8701 lp9301 mp7901 np8301 op7201 pp100 qp99 rp99 sp98 tp101
           up94 vp107 wp98 xp101 yp111 zp98 bap100 bbp103 bcp106 bdp117
           bep100 bfp134 bgp123 bhp_168 bip_150
array nhosp{*} M11101$$;
do i = 1 to dim(netto);
  if netto{i} >= 10 & < 20 then do;
    if i=1 and hosp{i}=-2 then nhosp{i}=0;
    if hosp{i} in (1,2) then nhosp{i}=2-hosp{i};
    if hosp{i} in (-1,-3) then nhosp{i}=-.1;
    if hosp{i} in (-2) then nhosp{i}=-2;
  end;
  else nhosp{i}=-2;
end;

```

<b>Variable Name</b>	M11102\$\$
<b>Variable Label</b>	Number of nights (days) stayed in hospital overnight in past year
<b>Unit of Observation</b>	Individual
<b>Description</b>	Number of nights (days) person stayed overnight in a hospital in previous year In 1990 and 1993 this information was not asked.
<b>Method</b>	Transcribed variable.
<b>Format</b>	-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 \_P.  
This algorithm omits individuals with survey non-responses.

### Algorithm

```

array hospd{*} ap5103 bpP7203 cp7203 dp7203 ep6903 fp8503 null hp8003 ip8003
null kp8703 lp9303 mp7903 np8303 op7203 pp10102 qp10002
rp10001 sp9901 tp10201 up9501 vp10801 wp9901 xp10201 yp11201
zp9901 bap10101 bbp10401 bcp10701 bdp11801 bep10101 bfp13501
bgp12401 bhp_169_01 bip_151_01
array nhospd{*} M11102$$;
do i = 1 to dim(netto);
if netto{i} >= 10 & < 20 then do;
if hospd{i}>=0 then nhospd{i}=hospd{i};
if hospd{i} in (-1,-3) then nhospd{i}=.M;
if hospd{i} in (-2) then nhospd{i}= 0;
end;
else nhospd{i}=.S;
end;

```

<b>Variable Name</b>	M11103\$\$
<b>Variable Label</b>	Whether had accident in past year that required hospitalization
<b>Unit of Observation</b>	Individual
<b>Description</b>	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.
<b>Method</b>	Transcribed variable.
<b>Format</b>	-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 \_P.  
This algorithm omits individuals with survey non-responses.

### Algorithm

```

null=.S;
array s03{*} null null null DP74 EP71 FP87 null HP82 IP82 null KP89 LP95 MP81
      np87 op76 pp104 null null null null null null null null null null
      null null null
array m03{*} M11103$$;
do i = 1 to dim(netto);
  if netto{i} >= 10 & < 20 then do;
    if s03{i} in (1,2) then m03{i}=1;
    if s03{i} in (3) then m03{i}=0;
    if s03{i} in (-1,-3) then m03{i}=-1;
    if s03{i} in (-2) then m03{i}=-2;
  end;
else m03{i}=-2;
end;

```

<b>Variable Name</b>	M11104\$\$
<b>Variable Label</b>	Frequency play sports or exercise
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates how often person plays sports, exercises or walks or swims. In several years the question related to this topic were not asked.
<b>Method</b>	Transcribed variable.
<b>Format:</b>	-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 \_P files.  
This algorithm omits individuals with survey non-responses.

### Algorithm

```

*** First code, generate one sport variable for east and west germans ***;
if gsampreg = 2 and zp0203 ge 0 then GP0413 = zp0203+1;
if gsampreg = 2 and zp0203 lt 0 then GP0413 = zp0203;
array sport{*} AP0202 BP0703 CP0903 null EP0903 null GP0413 null IP0703 null
               KP1203 LP0613 MP0503 NP0303 OP0613 PP0303 null RP0303 null
               TP1414 null vp0303 null xp0303 yp1815 zp0303 null bbp0303 null
               bdp11116 null bfp1103 null bhp_10_03 null
array nsport{*} M11104$$
do i = 1 to dim(netto);
  if netto{i} >= 10 & < 20 then do;
    if sport{i}=-1 then nsport{i}=-1;
    if sport{i}=-2 then nsport{i}=-2;
    if i = 1 then do;
      if sport{i} gt 0 then nsport{i}=sport{i};
    end;
  end;

  if i in (2,3,5,9,11,13,14,16,18,22,24,26,28,32,34) then do;
    if sport{i} =1 then nsport{i}=4;
    if sport{i} =2 then nsport{i}=3;
    if sport{i} =3 then nsport{i}=2;
    if sport{i} =4 then nsport{i}=1;
  end;

  if i in (7,12,15,20,25,30) then do;
    if sport{i} in (1,2) then nsport{i}=4;
    if sport{i} =3 then nsport{i}=3;
    if sport{i} =4 then nsport{i}=2;
    if sport{i} =5 then nsport{i}=1;
  end;
end;
else nsport{i}=-2;
end;

```

**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2008, 2010, 2012, 2014, 2016: Data not available in SOEP

```

array str{*} null null null null null null null null null null null null null null null null
           null null null null null null null null null null null zp10205 null bbp10006 null
           bdp11206 null bfp12906 null bhp_160_06 null
array m05{*} m11105$$;
do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if str{i} gt 0 then m05{i}=str{i};
    if str{i} in (-1,-3) then m05{i}=.M;
    if str{i} in (-2) then m05{i}=0;
  end;
  else m05{i}=.S;
end;
```

**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2008, 2010, 2012, 2014, 2016: Data not available in SOEP

```

array hbp{*} null null null null null null null null null null null null null null null null
           null null null null null null null null null null null zp10207 null bbp10008 null
           bdp11208 null bfp12908 null bhp_160_08 null
array m06{*} m11106$$;

do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if hbp{i} gt 0 then m06{i}=hbp{i};
    if hbp{i} in (-1,-3) then m06{i}=.M;
    if hbp{i} in (-2) then m06{i}=0;
  end;
  else m06{i}=.S;
end;

```

**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2008, 2010, 2012, 2014, 2016: Data not available in SOEP

```

array dia{*} null null null null null null null null null null null null null null null
           null null null null null null null null null null zp10201 null bbp10002 null
           bdp11202 null bfp12902 null bhp_160_02 null
array m07{*} m11107$$;

do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if dia{i} gt 0 then m07{i}=dia{i};
    if dia{i} in (-1,-3) then m07{i}=.M;
    if dia{i} in (-2) then m07{i}=0;
  end;
  else m07{i}=.S;
end;

```



**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2008, 2010, 2012, 2014, 2016: Data not available in SOEP

```

array can{*} null null null null null null null null null null null null null null null null
           null null null null null null null null null null null zp10204 null bbp10005 null
           bdp11205 null bfp12905 null bhp_160_05 null
array m08{*} m11108$$;

do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if can{i} gt 0 then m08{i}=can{i};
    if can{i} in (-1,-3) then m08{i}=.M;
    if can{i} in (-2) then m08{i}=0;
  end;
  else m08{i}=.S;
end;
```

**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2008, 2010, 2012, 2014, 2016: Data not available in SOEP

```

array psy{*} null null null null null null null null null null null null null null null
           null null null null null null null null null null zp10208 null bbp10009 null
           bdp11209 null bfp12909 null bhp_160_06 null
array m09{*} m11109$$;

do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if psy{i} gt 0 then m09{i}=psy{i};
    if psy{i} in (-1,-3) then m09{i}=.M;
    if psy{i} in (-2) then m09{i}=0
  end;
  else m09{i}=.S;
end;

```

**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2010, 2012, 2014, 2016: Data not available in SOEP

```

array art{*} null null null null null null null null null null null null null null null null
           null null null null null null null null null null null null null bbp10011 null
           bdp11211 null bfp12911 null bhp_160_11 null
array m10{*} m11110$$;

do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if art{i} gt 0 then m10{i}=art{i};
    if art{i} in (-1,-3) then m10{i}=.M;
    if art{i} in (-2) then m10{i}=0;
  end;
  else m10{i}=.S;
end;

```

**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 \_P.  
 This algorithm omits individuals with survey non-responses.

**Algorithm** 1984-2008, 2010, 2012, 2014, 2016: Data not available in SOEP

```

array ang{*} null null null null null null null null null null null null null null null
           null null null null null null null null null null zp10203 null bbp10004 null
           bdp11204 null bfp12904 null bhp_160_04 null
array m11{*} m11111$$;

do i = 1 to dim(netto);
  if netto{i} ge 10 & netto{i} le 19 then do;
    if ang{i} gt 0 then m11{i}=ang{i};
    if ang{i} in (-1,-3) then m11{i}=.M;
    if ang{i} in (-2) then m11{i}=0;
  end;
  else m11{i}=.S;
end;
```

<b>Variable Name</b>	M11112\$\$
<b>Variable Label</b>	Have or had asthma or breathing difficulty
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether person has or had problems with asthma or breathing difficulties
<b>Method</b>	n.a
<b>Format:</b>	n.a.
<b>Algorithm</b>	Information is <u>not</u> 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 \_P files.  
 This algorithm omits individuals with survey non-responses.

**Algorithm**

1984-2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017: Data not available in SOEP

null=-2;

```
array hlpstair{*} sp87 up84 wp88 yp100 bap88 bcp92 bep90 bgp106 bip_135
array hlthaffstair{*} M1111302 M1111304 M1111306 M1111308 M1111310
                        M1111314 M1111316;
```

```
do i = 1 to dim(hlpstair);
  if hlpstair{i} in (1, 2) then hlthaffstair{i} = 1;
  if hlpstair{i} = 3 then hlthaffstair{i}=0;
  if hlpstair{i} < 0 then hlthaffstair{i}=-1;
end;
```

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

<b>Variable Name</b>	M11115\$\$
<b>Variable Label</b>	Have difficulty or need help of others to dress
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether person has trouble with or needs help of others to dress. In 1984-1990 questions related to this topic were not asked.
<b>Method</b>	Transcribed variable.
<b>Format:</b>	-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 original survey variable "multgrad" which can be found in the file PFLEGE. This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	Note that, in the original survey data the questions in the SOEP asks about differing levels of help required in different years. Please refer to the "PFLEGE.DOC" document. The question from the original survey starts in 1991 and identifies individuals who "require help only with household chores, meals, and drinking."  <pre> if erhebj=&amp;year; if multgrad in (-1,-2,-3) then multgrad=9; char=put(multgrad,5.); simp&amp;year.=0; if substr(char,4,1)=1 then simp&amp;year.=1; if multgrad in (9) then do; simp&amp;year.=-1; end;  array simp{*} simp\$\$; array M15{*} M11115\$\$; do i = 1 to dim(netto); if netto{i} &gt;= 10 &amp; &lt; 20 then do; m15{i}=0; if simp{i} in (1) then m15{i}=1; if simp{i} in (.M) then m15{i}=-1; end; else m15{i}= -2; if i in (1,2,3,4,5,6,7) then m15{i}=-.2; end; </pre>



<b>Variable Name</b>	M11116\$\$
<b>Variable Label</b>	Have difficulty or need help of others to get in/out of bed
<b>Unit of Observation</b>	Individual
<b>Description</b>	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.
<b>Method</b>	Transcribed variable.
<b>Format:</b>	-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 the original survey variable "multgrad" and "maxgrad" which can be found in the file PFLEGE. This algorithm omits individuals with survey non-responses.

### Algorithm

```

if erhebj=&year;                                     (&year= 84, 85, ..., 90)
if maxgrad=1 then outh&year.=1;
if maxgrad=3 then do; inh&year.=1; outh&year.=1; end;
if maxgrad=5 then do; bed&year.=1; inh&year. =1; outh&year.=1; end;
if maxgrad in (-1,-3) then do; bed&year.=-1; inh&year.=-1; outh&year.=-1; end;
end;

if erhebj=&year;                                     (&year= 91, 92, ...)
if multgrad in (-1,-2,-3) then multgrad=9; char=put(multgrad,5.);
bed&year.=0;
if substr(char,5,1)=1 then bed&year. =1;
if multgrad in (9) then do;
  bed&year.=-1;
end;

array bed{*} bed$$;
array M16{*} M11116$$;
do i = 1 to dim(netto);
  if netto{i} >= 10 & < 20 then do;
    m16{i}=0;
    if bed{i} in (1) then m16{i}=1;
    if bed{i} in (.M) then m16{i}=.M;
  end;
  else m16{i}=.S;
  if i=1 then m16{i}=.S;
end;

```

<b>Variable Name</b>	M11117\$\$
<b>Variable Label</b>	Have difficulty or need help of others to shop
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether person has trouble with or needs help of others to shop. In 1984 questions related to this topic were not asked.
<b>Method</b>	Transcribed variable.
<b>Format:</b>	-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 survey variable "multgrad" and "maxgrad" which can be found in the file PFLEGE. This algorithm omits individuals with survey non-responses.

### Algorithm

```

if erhebj=&year;                                     (&year= 84, 85, ..., 90)
if maxgrad=1 then outh&year.=1;
if maxgrad=3 then do; inh&year.=1; outh&year.=1; end;
if maxgrad=5 then do; bed&year.=1; inh&year. =1; outh&year.=1; end;
if maxgrad in (-1,-3) then do; bed&year.=-1; inh&year.=-1; outh&year.=-1; end;
end;

if erhebj=&year;                                     (&year= 91, 92, ...)
if multgrad in (-1,-2,-3) then multgrad=9; char=put(multgrad,5.);
outh&year.=0;
if substr(char,1,1)=1 then outh&year.=1;
if multgrad in (9) then do;
outh&year.=-1;
end;

array outh{*} outh$$
array M17{*} M11117$$;
do i = 1 to dim(netto);
if netto{i} >= 10 & < 20 then do;
m17{i}=0;
if outh{i} in (1) then m17{i}=1;
if outh{i} in (.M) then m17{i}=.M;
end;
else m17{i}=.S;
if i=1 then m17{i}=.S;
end;

```

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

<b>Variable Name</b>	M11119\$\$
<b>Variable Label</b>	Difficulty doing housework
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates whether person has trouble doing housework. In 1984 questions related to this topic were not asked.
<b>Method</b>	Transcribed variable.
<b>Format:</b>	-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 survey variable "multgrad" and "maxgrad" which can be found in the file PFLEGE. This algorithm omits individuals with survey non-responses.

### Algorithm

```

if erhebj=&year;                                     (&year= 84, 85, ..., 90)
if maxgrad=3 then do; inh&year.=1; end;
if maxgrad in (-1,-3) then do; inh&year.=-1; end;
end;

if erhebj=&year;                                     (&year= 91, 92, ...)
if multgrad in (-1,-2,-3) then multgrad=9; char=put(multgrad,5.);
inh&year.=0;
if substr(char,2,1)=1 then inh&year. =1;
if multgrad in (9) then do;
inh&year.=-1;
end;

array inh{*} inh$$;
array M19{*} M11119$$;
do i = 1 to dim(netto);
if netto{i} >= 10 & < 20 then do;
m19{i}=0;
if inh{i} in (1) then m19{i}=1;
if inh{i} in (.M) then m19{i}=.M;
end;
else m19{i}=.S;
if i=1 then m19{i}=.S;
end;

```

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

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

<b>Variable Name</b>	M11122\$\$
<b>Variable Label</b>	Height in centimeters
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates each person's height in centimeters on the interview date. In 1984-2001, 2003/05/07/09/11,13 questions related to this topic were not asked.
<b>Method</b>	Transcribed variable.
<b>Format</b>	-2 = N/A - Child -1 = Item non-response 0 to 220 = Height in centimeters
<b>Algorithm</b>	<p>The original survey variables provided below can be found in the file _P and _PAGE17. This algorithm omits individuals with</p> <pre> array hgt{*} null null null null null null null null null null null null null null null null SP90 null up90 null wp94 null yp107null bap96null bcp100 null bep96 null bgp119 null bip_146; array hg2{*} null wj57 null yj57 null baj57null bcj57null bej57 null bgj100 null bij_100; array M22{*} m11122\$\$  do i = 1 to dim(netto); if netto{i} ge 10 &amp; netto{i} le 19 then do; if hgt{i} gt 0 then M22{i}=hgt{i}; if hgt{i} in (0,-1,-3) then M22{i}=.M; if hgt{i} in (-2) then M22{i}=.S; if hg2{i} gt 0 then M22{i}=hg2{i}; if hg2{i} in (0,-1,-3) then M22{i}=.M; if hg2{i} in (-2) then M22{i}=.S; end; else M22{i}=.S; end; </pre>

<b>Variable Name</b>	M11123\$\$
<b>Variable Label</b>	Weight in kilos
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates each person's weight in kilos on the interview date. In 1984-2001, 2003/05/07/09/11/13 questions related to this topic were not asked.
<b>Method</b>	Transcribed variable.
<b>Format</b>	-2 = N/A - Child -1 = Item non-response 0 to 400 = Weight in kilos
<b>Algorithm</b>	<p>The original survey variables provided below can be found in the file _P and _PAGE17. This algorithm omits individuals with survey non-responses.</p> <pre> array wgt{*} null null null null null null null null null null null null null null null null           SP91 null up91 null wp95 null yp108 null bap97 null bcp101 null bep97 null           bgp120 null bip_147 array wg2{*} null null null null null null null null null null null null null null null           null null null wj58 null yj58 null baj58 null bcj58 null bej58 null bgj101 null           bij_101 array M23{*} m11123\$\$  do i = 1 to dim(netto); if netto{i} ge 10 &amp; netto{i} le 19 then do; if wgt{i} gt 0 then m23{i}=wgt{i}; if wgt{i} in (0,-1,-3) then m23{i}=.M; if wgt{i} in (-2) then m23{i}=.S; if wg2{i} gt 0 then m23{i}=wg2{i}; if wg2{i} in (0,-1,-3) then m23{i}=.M; if wg2{i} in (-2) then m23{i}=.S; end; else m23{i}=.S; end; </pre>



<b>Variable Name</b>	M11124\$\$
<b>Variable Label</b>	Disability Status of Individual
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates disability status at the time of the survey for all individuals in the household 16 years of age and older.
<b>Method</b>	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. If in the following year a legally attested disability existed then this information is assigned to the previous year.
<b>Format</b>	-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 _P. This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	Degree of disability variable list by survey year - each entry denoted in algorithm as Ydisab: ap5202 bp7402 cp74b02 dp0602 ep6602 fp8202 gp7702 hp7702 ip7802 jp7802 kp8402 lp9102 mp7702 np8102 op7002 pp9702 qp9702 rp9702 sp9502 tp9902 up9202 vp10502 wp9602 xp10502 yp10902 zp9602 bap9802 bbp10102 bcp10402 bdp11402 bep9302 bfp13102 bgp110 bhp_164 bip_139  *This step is to assign a value for 1990 using 1991 degree of disability; if gnetto ge 10 & < 30 & ghnetto=1 then do; gp7702=0; if hp7702 > 0 then gp7702=hp7702; end;  *This step is to assign a value for 1993 using 1992 degree of disability; if jnetto ge 10 & < 30 & jhnetto=1 then do; jp7802=0; if ip7802 > 0 then jp7802=ip7802; end;  *This step is to assign values to respondents in 1986 missing degree of disability infor- mation; if cnetto >= 10 & < 30 and chnetto in (1) then do; if cp74b02<0 then do; if bp7402 > 0 then cp74b02 = bp7402; end;  *Next assign disability status for all individuals using the variable list shown above;  if Ydisab ge 30 then M11124\$\$=1; else M11124\$\$=0;

**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 \_\_P.  
 This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: D11101\_\_ = Age of Individual

**Algorithm**

Satisfaction With Health variable list by survey year - each entry denoted in algorithm as Ysatis

ap0301 bp0101 cp0101 dp0101 ep0101 fp0101 gp0101 hp1001 ip9801 jp0101 kp0101  
 lp0101 mp0101 np0101 op0101 pp0101 qp0101 rp0101 sp0101 tp0101 up0101  
 vp0101 wp0101 xp0101 yp0101 zp0101 bap0101 bbp0101 bcp0101 bdp0101  
 bep0101 bfp0101 bgp0101 bhp\_01\_01 bip\_01\_01

```

if D11101$$ ge 16 then do
  if Ysatis ge 0 then M11125$$ = Ysatis
  else M11125$$ = .M
end
if D11101$$ lt 16 then M11125$$ = .C
  
```

(Y=a-x, \$\$=84, ...)

<b>Variable Name</b>	M11126\$\$
<b>Variable Label</b>	Self-Rated Health Status
<b>Unit of Observation</b>	Individual
<b>Description</b>	This variable indicates each person's self-rated health status.
<b>Method</b>	Transcribed variable.
<b>Format:</b>	-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 <code>_P</code> and <code>_PAGE17</code> . This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	1984-1991, 1993: Data not available in SOEP 1992, since 1994:  <pre> array sta1{*} null null null null null null null null ip77 null kp83 lp89 mp75 np79                 op66 pp95 qp95 rp95 sp86 tp98 up83 vp104 wp87 xp104 yp99 zp95                 bap87 bbp97 bcp91 bdp110 bep89 bfp127 bgp105 bhp_158 bip_134 array sta2{*} null null null null null null null null null null null null null null null                 null null null null null null wj56 xj56 yj56 zj56 baj56 bbj56 bcj56 bdj56                 bej56 bfj56 bgj99 bhj_99 bij_99 array stat{*} M11126\$\$ do i = 1 to dim(netto); if netto{i} &gt;= 10 &amp; &lt; 20 then do; if sta1{i} ge 0 then stat{i}=sta1{i}; if sta1{i} in (-1,-3) then stat{i}=.M; if sta1{i} in (-2) then stat{i}=.S; if sta2{i} ge 0 then stat{i}=sta2{i}; if sta2{i} in (-1,-3) then stat{i}=.M; if sta2{i} in (-2) then stat{i}=.S; end; else stat{i}=-2; end; </pre>

<b>Variable Name</b>	M11127\$\$
<b>Variable Label</b>	Number of doctor visits in previous year
<b>Unit of Observation</b>	Individual
<b>Description</b>	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.
<b>Method</b>	Transcribed variable
<b>Format:</b>	-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 _P. This algorithm omits individuals with survey non-responses.
<b>Algorithm</b>	1990, 1993: Data not available in SOEP 1984-1989, 1991-1992, since 1994:  <pre> ap5001 = sum(ap5002-ap5012); bp7101 = sum(bp7102-bp7112); cp7101 = sum(cp7102-cp7112); dp7101 = sum(dp7102-dp7112); kp8601 = sum(kp8602-kp8612);  array s100{*} ap5001 bp7101 cp7101 dp7101 ep6801 fp8401 null hp7901 ip7901 null             kp8601 lp9201 mp7801 np8201 op7101 pp9801 qp9801 rp9801             sp9601 tp10001 up9301 vp10601 wp9701 xp10601 yp11001 zp9701             bap9901 bbp10201 bcp10501 bdp11601 bep9901 bfp13301 bgp12201             bhp_167_01 bip_149_01 array s101{*} ap5001 bp7101 cp7101 dp7101 ep6802 fp8402 null hp7902 ip7902 null             kp8601 lp9202 mp7802 np8202 op7102 pp9802 qp9802 rp9802 sp9602             tp10002 up9302 vp10602 wp9702 xp10002 yp11002 zp9702 bap9902             bbp10202 bcp10502 bdp11602 bep9902 bfp13302 bgp12202             bhp_167_02 bip_149_02 array s101{*} M11127\$\$ do i = 1 to dim(netto); if netto{i} &gt;= 10 &amp; &lt; 20 then do; if s100{i} ge 0 then s101{i}=4*s100{i}; if s100{i} in (-1,-3) then s101{i}=.M; if s100{i} in (-2) then s101{i}=0; end; else s101{i}=.S; end; </pre>

**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 \_\_P.  
 This algorithm omits individuals with survey non-responses.

Equivalent Data File Variable Definitions: D11101\_\_ = Age of Individual

**Algorithm**

Satisfaction With Life variable list by survey year - each entry denoted in algorithm as Ysatis:

ap6801 bp9301 cp9601 dp9801 ep89 fp108 gp109 hp10901 ip10901 jp10901 kp10401  
 lp10401 mp11001 np11701 op12301 pp13501 qp14301 rp13501 sp13501 tp14201  
 up14501 vp154 wp142 xp149 yp15501 zp15701 bap160 bbp15201 bcp151 bdp15801  
 bep151 bfp174 bgp175 bhp\_205 bip\_202\_01

if D11101\$\$ ge 16 then do (Y=a-x, \$\$=84, ...)

  if Ysatis ge 0 then P11101\$\$ = Ysatis

  else Ü11101\$\$ = .M

end

if D11101\$\$ lt 16 then P11101\$\$ = .C

<b>Variable Name</b>	W11101\$\$
<b>Variable Label</b>	Individuals Cross-sectional Weight – without 1 <sup>st</sup> wave of a subsample
<b>Unit of Observation</b>	Individual
<b>Description</b>	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\$\$.
<b>Method</b>	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.
<b>Format</b>	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.
<b>Algorithm</b>	<p>W11101\$\$ = Yphrf</p> <p><b>1998</b> W11101\$\$ = Ophrfad  <b>2000</b> W11101\$\$ = Qphrfae  <b>2002</b> W11101\$\$ = Sphrfaf  <b>2006</b> W11101\$\$ = Wphrfag  <b>2010</b> W11101\$\$ = BAphrfah  <b>2011</b> W11101\$\$ = BBphrfal2  <b>2012</b> W11101\$\$ = BCphrfaj  <b>2013</b> W11101\$\$ = BDphrfak  <b>2015</b> W11101\$\$ = BFphrfam1  <b>2016</b> W11101\$\$ = BGphrfam2  <b>2017</b> W11101\$\$ = BHphrfam2  <b>2018</b> W11101\$\$ = BIphrfan</p>

<b>Variable Name</b>	W11102\$\$
<b>Variable Label</b>	Household Weight
<b>Unit of Observation</b>	Household
<b>Description</b>	Indicates the household's sample weight.
<b>Method</b>	Household weights to compensate for unequal probabilities of selection and sample attrition are necessary to obtain populations based statistics.
<b>Format</b>	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.
<b>Algorithm</b>	$W11102\$ = Yhhrf$

<b>Variable Name</b>	W11103\$\$
<b>Variable Label</b>	Inverse staying probability
<b>Unit of Observation</b>	Individual
<b>Description</b>	Indicates the individual's longitudinal inverse staying probability to derive longitudinal weights.
<b>Method</b>	<p>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.</p> <p>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.</p> <p>Example:  longitudinal weight = W1110186*W1110387*W1110388*W1110389*W1110390</p> <p>The created longitudinal weight should be used with any longitudinal sample.</p>
<b>Format</b>	<p>N/A</p> <p>The original survey variables provided below can be found in the file PHRF. This algorithm omits individuals with survey non-responses.</p>
<b>Algorithm</b>	<p>1984: N/A  since 1985: W11103\$\$ = Ypbleib</p>



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

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

<b>Variable Name</b>	<b>Variable Label</b>
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\$\$
<b>Algorithm</b>	Data <u>not</u> available in SOEP

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