Swiss Household Panel Long file

User Guide

February 2025

By

Ursina Kuhn, Robin Tillmann, Florence Lebert, Erika Antal, Nora Dasoki, Claire Janssen, Valérie-Anne Ryser, Marieke Voorpostel

Table of contents

Index of variables that changed over time

1   Introduction

This document explains the structure and content of the SHP long files (chapter 2) and documents changes within variables over time (chapter 3), and whether and how the variables were harmonized in the long files.

2   Structure

The content of the long file mirrors the content in the annual files of the Swiss Household Panel (SHP). The variable names are the same as in the user files, but without the year identifier (e.g. pp01 rather than p$$p01, wstat rather than wstat$$).[1]

There are two main long files:

- shplong_p_user: Individual long file, which contains the same variables and cases as the annual individual files (shp$$_p_user), with some exceptions (see below).

- shplong_h_user: Household long file, which contains the same variables and cases as the annual household files (shp$$_h_user), with some exceptions (see below).

Figure 1 shows for fictional data (two individuals, two years, two variables) how the transformation from the annual files to the long file was done: A variable for the year of data collection was added (e.g. 1999 for wave 1)[2] and the year indication was removed from the variable name. Cases are identified by the combination of idpers and year (or idhous and year in the household file). Missing values are consistent with the annual files. If a variable was not collected in a year (and therefore not included in the annual file), the values are set to system missing.

Figure 1: Illustration of long file transformation

shp19_p_user

idpers	age19	p19c44
101	23	7
102	68	8

shp_long

idpers	year	Age	pc44
101	2019	23	7
101	2020	24	7
102	2019	68	8
102	2020	69	5

shp20_p_user

idpers	age20	p20c44
101	24	7
102	69	5

If you want to include variables that are not in the (annual) user files, the long file should be merged with the respective files (using idpers as a key). This concerns variables from unique files (shp_mp, shp_mh, shp_lj, shp_so, shp_ca), variables from additional data collections from the SHP samples (biographical surveys, Covid survey), imputed income and variables from the Cross-National Equivalent File (CNEF). The files that contain repeated measures (CNEF file, imputed income) are available in long

---

[1] This is why we also use the variable name without the year designation $$ in this guide, in contrast to the notation in the SHP User Guide

[2] To be precise, the year indicates the year the fieldwork was started. Data collection typically lasts from September to February (e.g. data collection for 2019 lasted from September 2019 to February 2020), with a large majority of interviews conducted in the first months, though.

format to simplify the merging procedure (using idpers/idhous and year as keys) in addition to the annual files. Sample syntaxes to combine different files are provided together with the data.

Although the information in the annual files and the long files are in principle identical, there are some exceptions. Firstly, the long file does not include variables collected only in 1999 without longitudinal information. Secondly, a single weight variable is included in each long file (cross-sectional weight keeping sample size and combining all samples). Thirdly, the long file does not contain the original variables on economic activity of each month. The calendar file containing harmonized monthly information should be merged with the long file to obtain this information.[3]

If data users have feedback on how to improve the long file or its documentation, please contact the SHP team.

3   Variable harmonization

Over time, some questions in the SHP questionnaires have changed (e.g. in question wording or response categories), which makes comparison over time problematic. There are different types of changes in variables that occurred over time. Here is an overview on how they are treated in the long file and documented in this guide.

Table 1: Types of changes in the variable

	Types of changes in the variable/concept	
1	Different variables in annual files measuring the same concept (e.g. pw34, pw34a)	Harmonization of data, documentation in 3.1
2	Fundamental changes in the response categories (e.g. social network, reasons not working)	Harmonization of data, documentation in 3.2
3	Addition of response categories (e.g. sex, reasons for part-time work)	No harmonization, documentation in 3.3
4	Weights: Changing variable names over time but consistent data	Harmonization of variable names in 3.4

---

[3] The calendar variables in the individual user files differ from calendar variables in the calendar file in two ways. First, the information in the annual files are more detailed in some waves. Second, information collected in two adjacent waves may overlap (activity status of the same month were collected twice). The calendar file contains only a single information for each month.

3.1 Harmonized variables: changes in question wording (different variables in annual files measuring the same concept)

3.1.1 Job position: management, supervision, production (pw34, pw34a)

There are three different versions of this question:

Table 2: Job position

1999-2003 (pw34)	2004-2006 (pw34a)	Since 2007 (pw34a)	**Categories of harmonized variable**
Do you hold a position in management, training or production?	Do you hold a position in management or in training?	Do you hold a position in management, supervision or production?	
1 Management position 2 Training position/ teacher 3 Production position 4 Other	1 Management position 2 Training position 3 No (-->3)	1 Management position 2 Supervision/training position 3 Production position 4 Other	1 Management position 2 Supervision/training position 3 Production position 4 Other

In the individual long file, the categories of the variable p34a are used since 2007. By definition, category 4 is empty for the years 2004 to 2006. The category is very rarely selected in other years.

3.1.2 Type of employment (pw29, pw29a, pw29b)

In 2004 and 2005, two questions (pw29a and pw29b) were asked instead of a single question (pw29).

For these years (2004, 2005), variable pw29 was constructed from pw29a and pw29b in the annual files. This construction did not allow to identify categories 1 and 2, which remained empty (in the long file as well as in the annual files for 2004 and 2005). The variable pw29a and pw29b are not included in the long file as they have no use for longitudinal analysis, and only pw29 is included in the long file. In the years 1999-2003 and since 2006, the variable pw29 was directly measured and no adjustments were made.

Table 3a: Type of employment in the annual files 2004-2005: Recoding pw29a and pw29b into pw29

pw29a	**pw29b**	**pw29**
1 Self-employed		3 Self-employed
2 Employed (including own family business)	(if p29a=2):	
	1 Employee/owner of S.A or Sarl	5 Employee of another private firm or government
	2 Employee in the family business	4 Partner in his/her relative's firm
	3 Employee of another public or private enterprise	5 Employee of another private firm or government
3 Unremunerated contributor to family business		4 Partner in his/her relative's firm

Notes: Question pw29a: "In your current job are you self-employed, employed (including in family business), or do you work for the family business without remuneration?"
Question pw29b: "Are you employed by a Limited Liability company (Ltd.) that belongs to you, by a company that belongs to your family, or another private or public company?"

Table 3b: Type of employment in the long file (pw29)

1999-2003, since 2006 (pw29)	2004-2005 (based on pw29a, pw29b)	Categories of harmonized variable
pw29 (collected)	**pw29 (harmonized)**	
1 Employed by a private household (houseworker, babysitter) 2 Employee of own Public Limited or Limited Liability Company 3 Self-employed 4 Partner in his/her relative's firm 5 Employee of another private firm or government	 3 Self-employed 4 Partner in his/her relative's firm 5 Employee of another private firm or government	1 Employed by a private household (houseworker, babysitter) 2 Employee of own Public Limited or Limited Liability Company 3 Self-employed 4 Partner in his/her relative's firm 5 Employee of another private firm or government

Note: Question for pw29: "In your current job, are you employed by a private household (houseworker, babysitter, ...), an employee of a Public Limited Company or Limited Liability Company which belongs to you, self-employed, partner in your relatives' firm or employee of a private firm or state firm?"

3.1.3 Other life events (pl35, pl36, pl37, pl38, pl40, pl90, pl91, pl92, pl93, pl95)

In the module about life events, a series of defined events is asked before the question (pl35) on whether other serious events affecting the respondent happened since the last interview. From 2000 to 2003, respondents could name up to 4 additional events, of which the most serious was documented in variables pl36, pl37, pl38, pl40 (see Table 4). From 2004 to 2023, only one event was asked and included as variables pl90, pl91, pl92, pl93, pl95.

For the long file, we moved the information from variables pl90, pl91, pl92, pl93, pl95 on another events to variables pl35, pl36, pl37, pl38, pl40 on the first other life event as measured in 1999 to 2003. The question wording was slightly different (see Table 4), but with identical meaning.[4] The variables pl90, pl91, pl92, pl93, pl95 were removed from the long file:

Information of pl90 (2004-2023) -> included as pl35
Information of pl91 (2004-2023) -> included as pl36

---

[4] Note that independently from the changed variable names in the annual file, the question on other life events refers to a rest category of events not asked specifically before. The number and types of events asked in these separate questions have changed over time: From 2000-2003 seven life events were asked: illness/accident, illness/accident of a closely related person, death of a closely related person, termination of a close relationship, conflict with related persons, problems with own children, threat or attack. From 2004-2005 nine life events were asked (removed: threat or attack; added: insult/threat, hit or wounded, harassment). From 2006-2008 eight life events were asked (removed: harassment). From 2009-2019, six life events were asked (removed: insult/threat, hit or wounded). Since 2021, seven life events were collected (removed: illness/accident; added: illness and accident separately). See the Excel file "Overview of variables by wave" on our website for details.

Information of pl92 (2004-2023) -> included as pl37
Information of pl93 (2004-2023) -> included as pl38
Information of pl95 (2004-2023) -> included as pl39

Table 4: Question wording for "other life events"

2000-2003 pl35, pl36, pl37, pl38	2004-2023 pl90, pl91, pl92, pl93, pl95
pl35: Since (month-year), have other serious events affecting you occurred, which have not yet been mentioned?	pl90: Since (month, year) has there been any other serious event that affected you and that has not yet been mentioned?
pl36: What was it? (Event 1)	Pl91: What was it?
pl37: When did it occur? (Event 1): month	Pl92: When did it occur? Month (asked until 2021)
pl38: When did it occur? (Event 1): year	Pl93: When did it occur? year
pl40: Are you still affected by this? 0 means "not at all" and 10 "a great deal".	pl40: Are you still affected by this, if 0 means "not at all" and 10 "a great deal"?

3.1.4 Partner since when (pd31c "pd31/pd31c: Partner: Since when: year", pd32c "pd32/pd32c: Partner: Since when: year"

The questions on the duration of the relationship with the spouse were reformulated in 2013 and 2015. From 1999 to 2012 respondents with a partner were asked when their relationship started, with separate questions for the year (pd31) and month (pd32)   (see Table 5). From 2003 to 2012, either the month question (pd32) or the year question (pd31) was asked, depending on whether the relationship was shorter or longer than one year (question d32m) at the time of the interview. Since 2013, there is only one question regarding the relationship start, with the year (pd31c) and month (pd32c) recorded in separate variables. For the long file, the information from the variables pd31 and pd32 has been merged to the variables pd31c (year when relationship started) and pd32c (month when relationship started).[5] The variables pd31 and pd32 are therefore redundant and have been removed from the long file.

Since 2015, respondents are asked to confirm the year in which their relationship started (pd32a). The year (pd31c) and month (pd32c) when the relationship started are only collected if the situation has changed (pd32a=2), if the information from the previous wave was not accurate (pd32a=3) or if no previous information is available. We advise data users to use the constructed variable ycouple to look at the relationship duration, as it provides information from previous years if the question was not asked and takes into account corrections. Ycouple is available from 2015 onwards.

---

[5] Between 2004 to 2012, either the year or the month the relationship started was indicated, depending on whether the relationship started more than a year ago (p32m). If the relationship started less than one year ago, the year of relationship start (pd31c) was attributed according to the month of the interview (pdate) and the month the relationship started (pd32).

Table 5 : Question wording for "Partner: since when"

1999-2003 pd31, pd32	2004-2012 pd32m, pd31, pd32	2013-2014 pd31c pd32c	Since 2015 pd32a pd31c pd32c ycouple
pd31: Since which year have you been with your partner/spouse? pd32: Since which month have you been together with your partner/spouse?	Pd32m: Since when have you been with your partner? (less than one year, more than one year) Pd31: Since which year have you been with your partner/spouse? (if more than one year according to pd32m) pd32: Since which month have you been together with your partner/spouse? (If less than one year according to pd32m)	Pd31c: Since when have you been with your partner? (year) Pd32c: Since when have you been with your partner? (month)	pd32a: You are with your partner since [year]. Is this right? Pd31c: Since when have you been with your partner? (year) Pd32c: Since when have you been with your partner? (month) ycouple: Constructed variable from pd31c of current wave and previous wave

3.2   Harmonized variables: fundamental changes in response categories

3.2.1   Social networks (pn10, pn17, pn24, pn31)

The way the network size is measured has changed in 2013. This concerns the variables pn10 (Contact with relatives: number of relatives), pn17 (number of neighbours), pn24 (number of close friends) and pn31 (number of colleagues). Where initially the respondent was asked for the number of connections (as a continuous variable), since 2013 respondents are presented with categories (ordinal variable).

Table 6: Size of social networks

From 1999 to 2010		Since 2013 (modules)		Categories of harmonized variables in long file	
0	None (--> 1)	0	No relatives/neighbours/ friends etc (--> 1)		
1	1 person (--> 2)	1	None (no contact)	1	None (including no contact or no network)
2	2 persons (--> 3)	2	1 person	2	1 person
3	3 persons (--> 4)	3	2 persons	3	2 persons
4	4 persons (--> 5)	4	3 persons	4	3 persons
5	5 persons (--> 5)	5	3 to 5 persons	5	3 to 5 persons

6	6 persons (--> 6)	6	6 to 10 persons	6	6 to 10 persons
7	7 persons (--> 6)	7	More than 10 persons	7	More than 10 persons
max	No defined maximal value (--> 7 if > 10)				

The long file contains the harmonized version of variables pn10, pn17, pn24, and pn31. If a finer distinction of the number of persons in the network is required (with data only until 2010), users are advised to use the annual individual files for these waves instead.

3.2.2   Job offered: earliest starting date (pw06)

Within the work module, people searching for a job are asked about their earliest starting date (n= about 100 – 300 observations per year). Since 2004, this variable is collected in more detail. For the harmonized version, we apply the broader definition used from 1999 to 2003 for all waves.

Table 7: Job offered, earliest starting date

1999-2003 (for harmonized variable)	Since 2004	Categories of harmonized variables in long file
1 immediately/within the next four weeks 2 not within the next four weeks 3 would not have been available	1 Immediately (--> 1) 2 Within the next 2 weeks (--> 1) 3 In 3 to 4 weeks (--> 1) 4 In 5 weeks to 3 months (--> 2) 5 Later, after 3 months or more (--> 2) 6 Not available (--> 3)	1 immediately/within the next four weeks 2 not within the next four weeks 3 would not have been available

3.2.3   Reasons for not working (pw12, pw13, pw14)

The response categories have changed fundamentally in 2004. The most recent categories have been taken as a reference in the long file and the categories used from 1999 to 2003 have been recoded to fit these new answer categories as indicated in the Table 7 below. Cases that could not be clearly attributed have been assigned to "other inactive person". From 1999 to 2003, the category 6 contains not only individuals who indicated "other", but also reasons that could not be attributed to the new categories. Therefore, the label of category 6 was adjusted.

Table 8: Reasons for not working (pw12, pw13, pw14)

From 1999 to 2003		Since 2004 (for harmonized variable)		Categories of harmonized variable	
1	Househusband/housewife (--> 5)	1	pupil, student, in further training or unpaid work experience	1	pupil, student, in further training or unpaid work experience
2	Private means/retired (--> 2)	2	in retirement or early retirement or has given up business	2	in retirement or early retirement or has given up business
3	Still at school (--> 1)	3	permanently disabled and/or unfit for work	3	permanently disabled and/or unfit for work
4	Still a student (--> 1)	4	in compulsory military or community service	4	in compulsory military or community service
5	Dismissed/made redundant/not found a job (--> 6 other) (n between 6 and 69 cases per year)	5	fulfilling domestic tasks or care responsibilities	5	fulfilling domestic tasks or care responsibilities
6	training/refresher course (--> 1)	6	other inactive person	6	**other inactive person /unknown**
7	military service/civil service (→ 4)	7	in early retirement or has given up business because of the coronavirus crisis (2020-2022)	7	in early retirement or has given up business because of the coronavirus crisis (2020-2022)
8	illness/temporary disability (--> 6)				
9	Disability (--> 3)				
10	maternity leave (--> 6)				
11	doesn't feel like working (--> 6)				
12	has no chance of finding a job (--> 6)				
13	already has a job (--> 6)				
14	other reason (--> 6)				
15	no other reason (has never been used)				

3.2.4 Job security: estimation (pw86, pw86a)

For the variable on job security, a separate category for temporary work was offered from 1999 to 2003 (pw86). This category was dropped in 2004 and does not exist in later waves (pw86a). To harmonize the variable, the response category temporary work is dropped, and these values are coded as missing in the long file.

Table 9: Job security

| 1999-2003 (pw86) | Since 2004 (pw86a) |
	Categories of harmonized variable in long file
1 very secure 2 quite secure 3 a bit insecure 4 very insecure 5 temporary (--> -8 "other error")	1 very secure 2 quite secure 3 a bit insecure 4 very insecure

3.2.5 Type of contract if limited in time (pw37)

The categories for the types of contract with limited duration changed in 2004. While the recoding of most categories used until 2003 is straightforward (1,2,3,4), other categories are less clear. Casual workers (category 5 until 2003) were combined with interim/temporary employment (category 3 since 2004) and the label was adjusted. The categories 4, 5, 8 and 9 were not observed before 2004. Due to the changed categories, the residual category (category 7 until 2003, category 10 since 2004) is not comparable over time as the alternatives have slightly changed.

Table 10: Type of contract if limited in time

1999-2003	Since 2004 (for harmonized variable)	**Categories of harmonized variable in long file**
1 as apprentice (--> 1)	1 An apprenticeship	1 An apprenticeship
2 as trainee (--> 2)	2 Training or voluntary work	2 Training or voluntary work
3 as unemployed person participating in occupational programme (--> 7)	3 Interim, temporary employment	3 Interim, temporary employment, **casual worker**
4 as seasonal worker (--> 6)	4 A project of limited duration	4 A project of limited duration
5 as casual worker (--> 3)	5 Occasional work (e.g. holiday job)	5 Occasional work (e.g. holiday job)
6 as other type of employee (--> 10)	6 Seasonal work	6 Seasonal work
7 through a placement agency (--> 10)	7 An occupational programme	7 An occupational programme
	8 A trial period	8 A trial period
	9 A Position regularly renewed (e.g. teaching)	9 A Position regularly renewed (e.g. teaching)
	10 Other	10 Other

3.2.6 External help (hf02, hf03, hf03a, hf14, hf14a, hf25, hf25a)

Until 2020, there was a filter question for any type of external help (hf02). Only households that replied positively to this filter question were asked about the four types of external help (housework, elderly, handicapped, childcare). Since 2021, all households are directly asked about each of the four types separately without a filter question (see Table 10a). As a consequence, the share of households with external help has increased to a small extent.[6] The answer categories (yes/no) remain unchanged.

---

[6] Looking at the averages in the two years before and after the change, the share of households with help for housework has increased from 16.2% to 19.2%, help for elderly from 0.9% to 1%, help for handicapped from 4.7% to 5.5%, help for childcare from 5.8% to 7.8%.

Table 11a: Questions on external help

1999-2020	Since 2021	Harmonized variables in long file
hf02: Do you get help regularly from someone not part of your household, either for housework, childcare, or care of elderly or handicapped persons living in your household? 1 = yes, 2 = no if hf02=1 hf03: And what for? Housework. if hf02=1 hf14: And what for care for? Elderly persons. if hf02=1 hf25: And what for? Care of handicapped persons. if hf02=1 hf36: And what for? Childcare.	hf03a: Do you get help regularly from someone not part of your household for housework? hf14a: Do you get help regularly from someone not part of your household for care of elderly? hf25a: Do you get help regularly from someone not part of your household for handicapped persons living in your household? hf36a: Do you get help regularly from someone not part of your household for childcare?	hf03: regularly help from someone not part of your household for housework Hf14: regularly help from someone not part of your household for care of elderly hf25: regularly help from someone not part of your household for handicapped persons living in your household hf36: regularly help from someone not part of your household for childcare

The variables have been harmonized in the following way, dropping the variables hf03a, hf14a, hf25a and hf36a from the long file.

Table 10b: Rules for harmonization of external help

Harmonized in long file		1999-2020	Since 2021
hf03	Housework	Yes if hf03=1 No if hf02=2 (no external help) or hf03 =2 (external help, but not for housework)	same as hf03a
hf14	Care for elderly	Yes if hf14=1 No if hf02=2 (no external help) or hf14 =2 (external help, but not for elderly)	same as hf14a
hf25	Care for handicapped persons	Yes if hf25=1 No if hf02=2 (no external help) or hf25=2 (external help, but not for handicapped persons)	same as hf25a
hf36	Childcare	Yes if hf36=1 No if hf02=2 (no external help) or hf36=2 (external help, but not for childcare)	same as hf25a. Asked only if children <15 years old are in the household
hf02	Any external help	Original value	"No" if all separate questions (housework, elderly, handicapped persons, children) were answered with no. "Yes" if one separate question was answered with yes.

3.2.7 Voluntary work (pn34, pn35)

There has been a change in the filter for the question "Do you have honorary or voluntary activities within an association, an organisation or an institution?" (pn35). In 1999 and since 2011, the question was asked to all respondents of the individual questionnaire. Between 2000 and 2010, there was a filter according to the previous question asking whether the respondent takes part in a club or another group, including religious groups (pn34=1). Therefore, the original variable P$$N35 in the annual files has fewer observations in the years between 2000 and 2010. Because respondents not part of a club, and who are less likely to do voluntary activities within a club, have missing information (value of -3), the prevalence of voluntary work among respondents is higher in the annual files between 2000 and 2010.

The variables in the long file have been harmonized by adjusting the values from the years 2000 – 2010 and leaving values from 1999 and since 2011 unchanged. Accordingly, the variable pn35 in the long file differs from the variable in the annual files (P$$N35) for the years 2000-2010. In the long file, for 2000-2010, respondents who were not part of a club or another group (pn34=2) were assigned a value of 2 (no voluntary work) in the variable pn35 (pn35=2). For the year 1999 and since 2011, the variable in the annual files (P$$N35) is identical to the variable in the long file (pn35).

Note that the harmonised variable pn35 has a comparable share of positive values across years, but the prevalence of voluntary work is slightly underestimated in the years 2000-2010. The original filter of the variable from 2000 to 2010 was set on the assumption that individuals who are not part of a club or another group are not involved in voluntary work. From other years of data collection, we

know that, on average, 10% of respondents who are not part of clubs or other groups still report voluntary work. If the evolution of voluntary work from 2010 and 2011 is central to their research, users may opt for other approaches for harmonization.[7]

1999, since 2011	2000-2010	Harmonized variables in long file
FILTER: all Values: -3 inapplicable -2 no answer -1 does not know 1 yes 2 no	FILTER: if pn34=1 Values: -3 inapplicable (including pn34=2) -2 no answer -1 does not know 1 yes 2 no	FILTER: all Values: -3 inapplicable -2 no answer -1 does not know 1 yes 2 no (including pn34=2 in years 2000-2010)

3.3   Additional response categories

For below variables additional response categories were added over the course of the study. Here these variables are documented; no changes were made to the data in the long file.

3.3.1   Sex

Introduction of a third category (3 "divers") in 2021.

3.3.2   Online social networks (pn109)

Introduction of a new category (9 "Instagram") in 2019.

3.3.3   Confession or religion (pr01)

Four additional categories were added in 2015 (9 "Evangelical", 10 "Christian orthodox", 11 "Buddhist", 12 "Hindu").

3.3.4   Prayers apart from church or religious community (pr05)

Category "several times a day" (value 6) was introduced in 2012.

3.3.5   Reason for part-time work (pw43)

Category 8 "short-time working" was added in 2010.

---

[7] Values are comparable across years if the approach used in 2000-2010 is applied to the other years. By recoding all values of pn35 as missing if respondents are not part of clubs or another groups (variable pn34), the subpopulation and values are comparable across waves (pn35=-3 if pn34=2). However, values of pn35 are only available for the subsample of respondents who are part of a club or another group. An alternative would be to impute missing values in 2000-2010 according to the specific need of the data user.

3.3.6 Reason for change of job or employer (pw600, pw601)

When asked for the first and second reason for a change of job or employer, a large share of respondents (up to 43%) chose category 7 "other reasons". Therefore, in 2014 respondents were asked to report what other reason made them change jobs or employer. In 2015, new categories were added. In 2016, further categories were added (positioned in the middle of the scale).

Table 12: Reason for change of job or employer

2004-2014	2015	2016 onwards
1 To take up or seek better job	1 To take up better job (wish for change, new challenge, advancement, dissatisfaction with former employer)	1 To take up better job (wish for change, new challenge, advancement, dissatisfaction with former employer)
2 End of temporary contract	2 End of temporary contract	2 End of temporary contract
3 Obliged to stop by employer (business closure, redundancy, early retirement, dismissal etc.)	3 Obliged to stop by employer (business closure, redundancy, dismissal etc.)	15 Obliged to change jobs because of a complete closure of the company or complete closure of divisions of the company 16 Obliged to change jobs because of the employer (cuts in manpower, redundancy)
4 Sale of closure of own/family business	4 Sale or closure of own/family business, end of self-employment	4 Sale or closure of own/family business, end of self-employment
5 Child care and care for other dependant	5 Child care and care for other dependant	5 Child care and care for other dependant
6 Partner's job required us to move to another area or marriage	6 Partner's job required us to move to another area or marriage	6 Partner's job required us to move to another area or marriage
	8 Reduce commuting time	8 Reduce commuting time
	9 Change of working time (increase or reduction of work percentages, more regular hours, avoid shift work)	9 Change of working time (increase or reduction of work percentages, more regular hours, avoid shift work)
	10 Training, internship, studies (end, start, dropout, further training)	10 Training, internship, studies (end, start, dropout, further training)
	11 Start self-employment/start own business/start work for family business	11 Start self-employment/start own business/start work for family business
	12 Health problems (burnout, accident, etc.)	12 Health problems (burnout, accident, etc.)
	13 Conflicts, mobbing, problems with superiors, bad work climate	13 Conflicts, mobbing, problems with superiors, bad work climate

	14 Without work before starting actual employment (unemployment, army, civil service, homemaker)	14 Without work before starting actual employment (unemployment, army, civil service, homemaker)
7 Other reasons	7 Other reasons (seasonal work, journey, timeout, retirement)	7 Other reasons (seasonal work, journey, timeout, retirement)

3.4 Variables with changes not harmonized

In this chapter, variables with response categories that have changed over time are listed. These variables have not been harmonized in the long file. However, suggestions are made how the variables can be harmonized.

3.4.1 Education levels (pe01, pe04, pe05, pe07, pe15, xe01)

The categories are identical for all these variables measuring educational level. These categories have changed in 2007, most importantly distinguishing different types of tertiary education. The changes mirror fundamental changes in the Swiss educational system and were not harmonized for the long file. However, the constructed variables educat, edcat, isced, edu_1_, edugr and edyear (in the annual files) have been harmonized over the different waves as far as possible.

Until 2006, all types of tertiary education were coded as 14 and 15 (see Table 12 below). From 2007 onwards, codes 16 and 17 were added. For researchers wishing to harmonise variables, codes 16 and 17 should be combined with 14.

Another change concerns teacher trainings, which have been fundamentally transformed. Older cohorts received teacher training at Upper Secondary level (code 7 until 2006, code 18 since 2007). Younger cohorts have teacher training as a tertiary education (code 14 until 2006, code 16 since 2007).[8]

Table 13: Educational levels

1999-2006	Since 2007
0 incomplete compulsory school	0 incomplete compulsory school
1 only completed compulsory school	1 only completed compulsory school
2 elementary vocational training (firm + school)	2 elementary vocational training (firm + school)
3 apprenticeship (CFC level)	3 apprenticeship (CFC/EFZ level)
4 2 to 3 years: full-time vocational school	4 2 to 3 years: full-time vocational school
5 vocational maturity	5 vocational maturity
6 2 to 3 years: general training school	6 2 to 3 years: general training school
7 High school, Maturity/Training or Teacher's Training College	7 bachelor/maturity (high school)
8 1 year: school of commerce/au pair/residential language course	8 1 year: school of commerce/au pair/residential language course
12 Vocational high school with master certif, fed certificate	12 Vocational high school with master certificate, federal certificate
13 technical or vocational school	13 technical or vocational school
14 Voc high school/tech coll/engineering ETS (3 - 4 years)/specialised high school	14 vocational high school ETS, HTL etc.
15 University, High school (first academic degree /doctorate / post-graduate degree)	15 University, academic high school, EPF, ETH (bachelor, master, doctorate, post-graduate degree)
	16 university of teacher education HEP, PH (--> 14)
	17 university of applied sciences HES, FH (--> 14)
	18 teacher training school (--> 7)
	32 specialized school for handicapped

---

[8] Example syntax for harmonisation : recode pe01 (16=14) (17=14) (18=7)

3.4.2 Type of working hours (pw71, pw71a)

The response categories for type of working hours have changed over time. As the changes were considerable, a new variable was created. If changes over time are of interest (distinction between fixed hours and not fixed hours), pw71 and pw71a need to be combined. Otherwise longitudinal analysis should start at 2004.

Table 14: Type of working hours

1999-2003 (pw71)	Since 2004 (pw71a)
1 fixed hours	1 Same every day
2 flexible hours with set hours	2 Alternating, shift (2x8, 3x8, shift, team)
3 with registration of time worked (for example clocking in)	3 Varies from day to day, decided by employer
4 without registration of time worked	4 Varies from day to day, you decide
5 rotating shift: frequently	
6 rotating shift: occasionally	

3.4.3 Work at home (pw80, pw80a)

Both variables are provided in the long file but without standard harmonization. The harmonization depends on the research purpose.

Table 15: Work from home

1999-2020 (pw80)	Since 2021(pw80a)
1 Yes, overtime	1 In my job it is not possible to work from home
2 Yes, occasionally	2 Never, as I don't want to work from home
3 Yes, always	3 A few times a year
4 Yes, workshop/practice/office of own company within own home/farm	4 About once a month
5 no	5 About once a week
	6 Several days a week
	7 I work mainly at home

3.4.4 Savings (hi20, hi20n, hi20ac, hi21, hi21n, hi21ac)

Within the module on material deprivation, households are asked whether they are able to save on a monthly basis (hi20, hi20n, hi20ac) and if not, why (hi21, hi21n, hi21ac). The threshold for these savings has been adapted over time: from 100 CHF (1999-2003), to 400 CHF (2009-2012) and to 500 CHF (since 2013). The variable names have changed accordingly (see Table 15 below). The question about savings was not collected from 2004 to 2008.

Table 16: Savings

1999-2003	2009-2012	Since 2013
hi20: Can save at least 100 CHF monthly	hi20n: Can save at least 400 CHF monthly	hi20ac: Can save at least 500 CHF monthly
hi21: Reason why no savings of at least 100 CHF monthly	hi21n: Reason why no savings of at least 400 CHF monthly	hi21ac: Reason why no savings of at least 500 CHF monthly

This variable is not harmonized in the long file as the content of the question was modified. However, depending on the research question, harmonization for the period since 2009 can be justified. First, inflation reduces the difference between the 400 CHF and 500 CHF slightly. Second, the share of households who can save is reduced, but not drastically.

3.4.5 Participation in religious services: frequency (pr02, pr03, pr04)

The variable for participation in religious services (pr04) is a constructed variable using information from pr02 and pr03. Up to 2014, only the variable pr04 was provided in the user data. Since 2015, pr02 and pr03 have been added in the annual user files. Only the variable pr04 is included in the long file.

3.4.6 Car: type of engine (hi136)

In 2020, a question on the type of engine of the household's car was introduced. The question wording was reformulated from 2023 onwards, but the response categories have remained the same. The reformulation should have no impact on the response patterns and the variable is comparable over time.

Table 17: Car, type of engine

2020-2022	Since 2023
What kind of engine does your car have?	What type of fuel does your car use?
1 Gasoline/Diesel	1 Gasoline/Diesel
2 Hybrid	2 Hybrid
3 Electric	3 Electric
4 Natural gas	4 Natural gas
5 Other	5 Other
Instruction: If you own several cars, consider the main (most used) car.	

3.4.7 Income variables

The income variables provided in the user files are constructed and harmonized as far as possible. The underlying questions to collect information on income have changed several times (2000, 2002, 2004, 2014). These changes, their implication and construction of the income variables are described in the documentation "Collection Construction Checks Income", which is available on SWISSUBase and on the SHP website: (www.swisspanel.ch -> documentation -> SHP main study documentation -> Additional Documentation -> Documentation of income variables).

Imputed income variables are available in a separate file (also in long format).

The income variables are in nominal CHF. To adjust for inflation, price indexes from the [Swiss Federal Statistical Office](#) can be used. The price index is also included in the long file with imputed income.

3.4.8 Financial help (hi76, hi76a)

The variables hi76 (financial help more generally; asked until 2003) and hi76a (subsidies for health care premiums; asked since 2004) have not been harmonized. However, as the most frequent financial help is by far subsidies for health care, the share of households receiving help is similar for these two questions.

In theory, the change in 2004 should lower the share of households receiving financial aid, as the question from 2004 refers only to one type of financial aid. However, the share of households increased slightly from 16% to 18% (for the SHP_I sample) comparing the years 2002/2003 and 2004/2005.

It is up to the data user to decide whether the variable can be considered as comparable for their specific research question.

Table 18: Financial help

1999-2003 (hi76)	Since 2004 (hi76a)
Have you received financial help, for example help with your health insurance premium, income supplement or welfare?	Have you received financial help for your health insurance premium? Instruction: institutional help only

3.4.9 Political parties (pp11, pp19)

Due to changes in the party landscape in Switzerland, several changes have been made to the political parties listed in the response categories over the years for the questions on political party membership (pp11) and party choice (pp19):

- 2008: GLP (Green liberal party) was added (code 20).
- 2009: BDP (Conservative Democratic Party) was added (code 21).
- 2011: PLR (Les Libéraux-Radicaux) was added (merge of PRD and PLS; code 22).
- 2011: MCG (Mouvement Citoyens Genevois) was added (code 23).
- 2021: The Centre (after renaming the Swiss Christian Democratic party and fusion with the BDP) was added (code 24).

3.4.10 Health problems (pc04, pc05, pc06, pc07, pc04a, pc05a, pc06a, pc07a)

In the collection of health problems, the reference period has been reduced from 12 months to 4 weeks:

Table 19: Health problems

1999-2003	Since 2004
pc04: back problems last 12 months	pc04a: back problems last 4 weeks
pc05: weakness, weariness last 12 months	pc05a: weakness, weariness last 4 weeks
pc06: sleeping problems last 12 months	pc06a: sleeping problems last 4 weeks
pc07: headaches, facial pains last 12 months	pc07a: headaches, facial pains last 4 weeks

3.4.11 Chronic health problems (pc19, pc19a, pc21, pc22, pc21a, pc22a, pc22b)

In 2004, the question on chronic health problems and disabilities was reformulated (pc19a). The answer categories (yes/no) remain the same. Moreover, whereas pc19 was only asked at the first interview until 2003, annual measurements are available only as of 2004. Between 2014 and 2020, no further information about the chronic health problem have been collected.

Table 20: Chronic health problems, yes-no

1999-2003	Since 2004
Filter: if first interview pc19: Are you suffering from a long-term health problem or disability of a psychological or physical nature? Instruction: Psychological problem is the same as mental problem; if several, take the problem which lasted the longest.	pc19a: Do you suffer from (have) any chronic (long standing) illness or condition (health problem)?

Accordingly, the follow-up questions if there is a chronic health problem have also changed:

Table 21: Chronic health problems, since when, main cause and list of illnesses

1999-2003	2004-2013	Since 2021
Filter: if first interview and if Pc19=1 pc21: Since when have you suffered from this health problem (disability)? pc22: What is the main cause of this health problem?	Filter: if Pc19=1 pc21a: Since when do you have this problem? pc22a: What's the main cause of this problem (chronic illness or health problem)? (same categories as for pc22) pc22b: Is it a physical or a psychological problem?	Filter: if Pc19=1 pc21a: Since when do you have this problem? List of health problems: Introduction: "Have you had one of the following health problems, either since (month/year) or chronic? With this we mean that a doctor has diagnosed this condition."

		pc195: Allergies, e.g. hay fever
		pc196: Asthma
	22	pc197: Arthritis, including arthrosis, or rheumatism
		pc198: Cancer
		pc199: Heart problem
		pc200: Chronic lung disease
		pc201: Diabetes
		pc202: High blood pressure
		pc203: Stomach
		pc204: Stroke, cerebral vascular disease
		pc205: Burnout
		pc206: Depression
		pc207: Other psychological or psychiatric health problem

3.5   Weights

There is only one personal weight variable (picss) and one household weight variable (whcss) in the long file. These weights are cross-sectional and include all subsamples.