



Schweizer Haushalt-Panel Panel suisse de ménages Swiss Household Panel

# Swiss Household Panel Documentation on constructed variables (1999 - 2022)

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# **1** Introduction

This document presents background information on the construction of variables in the following domains:

- Survey participation
- Socio-demographic information
- Education
- Occupation and social position
- Income
- Geographical information.

For a complete list of constructed variables, we refer to our search tool on <u>www.swisspanel.ch</u> (search within list of variables, select any questionnaire and select variable type "constructed").

# 2 Survey participation

| Variable name | Variable label   | Description   |
|---------------|--|---|
| OSM           | Original sample<br>member                                | indicates whether a sample member was present in<br>the first wave of the sample (1999, 2004, 2013 and<br>2020 for SHP_I, _II, _III and _IV respectively).<br>People who join the panel after the first wave are<br>"non-original sample members" (non-OSMs).<br>Categories: OSM, child of OSM and non-OSM.<br>Included in the MP file.   |
| RNPX\$\$      | Participation status                                     | gives the most recent available information<br>concerning participation status. It distinguishes<br>between participation, non-contact, and various<br>categories of refusal and ineligibility. For example, if<br>a respondent left the country in Wave 10, then in that<br>wave and in all waves thereafter the variable will<br>indicate this status. Included in the MP file. |
| STATUS\$\$    | Type of interview<br>completed: grid, proxy,<br>personal | shows the sample member's participation in the<br>wave to which \$\$ refers. Categories: completed<br>individual questionnaire, the reference person<br>completed a proxy questionnaire for this person,<br>sample member is mentioned in the grid only. All<br>other cases are set to missing. Included in both the<br>MP and annual P files.                                    |

Table 1 Constructed variables related to survey participation

# 3 Socio-demographic information

| Variable<br>name | Description   | Information used for construction   |
|------------------|---|---|
| HLDTYP\$\$       | Type of household Classification<br>adopted from <b>European Community</b><br><b>Household Panel</b> (Eurostat, 2003)<br>and PACO   | Relationship to other persons in household, civil status, number of persons and children in household       |
| HLDFFS\$\$       | Household typology adopted from the<br>Fertility and Family Survey (FFS).<br>The FFS was launched by the United<br>Nations Economic Commission for<br>Europe and was commissioned by the<br>Swiss Federal Statistical Office for<br>Switzerland (www.bfs.admin.ch). | Relationship to other persons in<br>household, civil status, number of<br>persons and children in household |
| HLDCEN\$\$       | Household typology <b>Swiss Census</b> ,<br>Swiss Federal Statistical Office<br>( <u>www.bfs.admin.ch</u> )   | Relationship to other persons in<br>household, civil status, number of<br>persons and children in household |

Table 2 Constructed household typology variables in household file<sup>a</sup>

<sup>a</sup>) An additional family typology HLDCOMP\$\$ is released as a separate datafile. This typology shows the different conjugal and parental relationships, distinguishing between own, shared and stepchildren, lone parent households and between married and cohabiting couples. See <a href="https://forscenter.ch/projects/swiss-household-panel/documentation/">https://forscenter.ch/projects/swiss-household-panel/documentation/</a> under SHP Main study documentation, additional documentation for more information on this variable.

Table 3 Constructed household composition variables in household file

| Variable<br>name | Description   | Information used for<br>construction |
|------------------|---|--------------------------------------|
| MAXCOH\$\$       | Maximum duration of existence of household  | Longest time of two members          |
|                  | in years  | living together in years             |
|                  |   | (information from grid)              |
| NBADUL\$\$       | Number of adults in hld (>=18)  | Information from grid                |
| NBKID\$\$        | Number of children in hld (0-17)  | Information from grid                |
| AOLDKI\$\$       | Age of oldest coresident child (max. 17)  | Information from grid                |
| AYOUKI\$\$       | Age of youngest coresident child (max. 17)  | Information from grid                |
| ADUK1_\$\$       | Number of adult children in hld (>=18 & <30)  | Information from grid and            |
|                  |   | individual questionnaire             |
| ADUK2 \$\$       | Number of adult children in hld (>=30)  | Information from grid and            |
|                  |   | individual questionnaire             |
| NBB \$\$         | New-born baby: birth between two  | Information from household and       |
|                  | consecutive grid interviews or within last 12 months if no previous year grid interview | individual master file               |

| Variable   | Description  | Information used for construction  |
|------------|--|--|
| name       |  |  |
| AGE\$\$    | Difference between year of birth and<br>the year of interview (the year of the<br>beginning of the wave in question,<br>even when interview took place<br>beginning of following calendar year)                            | Collected once, confirmed next waves   |
| SEX\$\$    | Gender of respondent   | Collected once, confirmed next waves   |
| CIVSTA\$\$ | Civil status in year of interview  | Information from household grid and<br>personal interview. Equivalent to<br>question P\$\$D13. Individual<br>information is considered more<br>reliable than from reference person |
| MAXCOP\$\$ | Max. time in years of person living with someone else in household   | Information from grid  |
| NAT_1_\$\$ | First nationality  | Grid and individual questionnaire  |
| NAT_2_\$\$ | Second nationality   | Grid and individual questionnaire  |
| NAT_3_\$\$ | Third nationality  | Grid and individual questionnaire  |
| REG_1_\$\$ | Nationality by world region, based on  | Grid and individual questionnaire  |
| REG_2_\$\$ | statistical office. Categories:  |  |
| REG_3_\$\$ | Switzerland, Northern Europe, Eastern<br>Europe, Central Europe, Western<br>Europe, South-West Europe, Southern<br>Europe, South-East Europe, Africa,<br>Northern America, Latin America, Asia,<br>Oceania and Antarctica. |  |
| HAB_CH\$\$ | Duration of residence in CH  | Grid and individual questionnaire  |
| OWNKID\$\$ | Number of own (biological or adopted)<br>children (individual level)   | Constructed based in individual<br>questionnaire, verified by the<br>respondent  |

Table 4 Constructed socio-demographic variables in individual files

# **4** Education

| Variable<br>name | Description   | Information used for construction   |
|------------------|---|---|
| EDUCAT\$\$       | Highest level of education achieved (11 categories)   | Household grid and individual interview.<br>Individual interview considered more reliable.  |
| EDCAT\$\$        | Highest level of education achieved (17 categories)   | Household grid and individual interview.<br>Individual interview considered more<br>reliable.   |
| ISCED\$\$        | International Standard Classification of Education. Highest level of education achieved (10 categories) | Based on EDCAT\$\$ and the ISCED-<br>classification scheme. <sup>1</sup>  |
| EDYEAR\$\$       | Years of education  | Based on the ISCED-classification. Gives the number of years relative to the highest finished type of education (estimation) <sup>2</sup> |

Table 5 Constructed variables related to education in the individual files<sup>1</sup>

<sup>1</sup>) For a complete list of variables on education we advise to go to our website and browse through our research tools (<u>https://forscenter.ch/projects/swiss-household-panel/documentation/</u>).

Table 6 shows how the values on the variable EDCAT\$\$ translate to the values of ISCED\$\$ and EDYEAR\$\$. ISCED\$\$ is based on the classification scheme from 1997. In Wave 19, however, we introduced four new items (P\$\$E43 - E46) that allow distinguishing university degrees. This new information makes it possible to construct an education variable based on the International Standard Classification of Education 2011. While we do not provide this variable in the individual file, the syntax is available upon request.

<sup>&</sup>lt;sup>1</sup> Bundesamt für Statistik (BFS). 2015. Nomenclatures – International Standard Classification of Education. <u>http://www.portal-stat.admin.ch/isced97/docs/do-d-15.02-isced-01.pdf</u> (German), or <u>http://www.portal-stat.admin.ch/isced97/docs/do-f-15.02-isced-01.pdf</u> (French). See Table 6 for the conversion from EDCAT\$\$. <sup>2</sup> See Table 6 for the conversion from EDCAT\$\$.

| EDCAT   | EDCAT | EDYEAR         | ISCED    |
|---|-------|----------------|----------|
| Value label   | Value | Value          | Classif. |
| Specialized school for handicapped                              | -6    | -6             | -6       |
| Pre-obligatory schooling  | -5    | 0              | 0        |
| Not yet school age  | -4    | 0              | 0        |
| No answer   | -2    | -2             | -2       |
| Does not know   | -1    | -1             | -1       |
| Incomplete compulsory school                                    | 0     | 8 <sup>a</sup> | 0        |
| Compulsory school   | 1     | 9              | 2        |
| Elementary vocational training                                  | 2     | 10             | 3C       |
| Domestic science course, 1 year school of commerce              | 3     | 10             | 3C       |
| General training school   | 4     | 10             | 3C       |
| Apprenticeship (CFC, EFZ)                                       | 5     | 12             | 3B       |
| Full-time vocational school                                     | 6     | 12             | 3B       |
| Vocational maturity   | 7     | 14             | 4A       |
| Teacher training college  | 8     | 13             | ЗA       |
| Bachelor/maturity (high school)                                 | 9     | 13             | ЗA       |
| Vocational high school with MA certificate, federal certificate | 10    | 16             | 5B       |
| Technical or vocational school                                  | 11    | 16             | 5B       |
| Vocational high school ETS, HTL etc.                            | 12    | 16             | 5B       |
| University of teacher education HEP, PH                         | 13    | 18             | 5A       |
| University of applied sciences HES, FH                          | 14    | 18             | 5A       |
| University, academic high school, EPF, ETH                      | 15    | 18             | 5A       |
| PhD   | 16    | 21             | 6        |

#### Table 6 Values of EDCAT\$\$, EDYEAR\$\$ and ISCED\$\$

<sup>a</sup>) For all respondents aged older than 15. Respondents younger than 6 are coded 0, for respondents between 6 and 15 we subtracted 6 from their age.

# 5 Occupation and social position

#### 5.1 Overview

**WSTAT\$\$:** Work status is constructed from P\$\$W01 (working for pay last week), P\$\$W03 (have a job although not working last week) and P\$\$W06 (can start work immediately), from the individual questionnaire. Another occupational variable is OCCUPA\$\$, this information comes from the grid and should be considered as less reliable.

All social stratification measures presented below are based on the respondents' occupational titles (P\$\$W28), which were carefully coded by the Swiss Federal Statistical Office. This Swiss-specific code was then recoded into the International Standard of Classification of Occupations (ISCO-08), developed by the International Labour Office (1990). Note that until the release of Wave 23 we provided the ISCO-88 codes, and all typologies were based on these codes. From the release of Wave 24 onwards, we provide only the ISCO-08 codes for all waves. Please contact us if you require the ISCO-88 codes.

The SHP provides the following occupational classifications:

- The Wright class structure (Wright III)
- Erikson, Goldthorpe and Portocarero's class schema (EGP)
- The European Socio-economic Classification (ESeC)
- The Swiss Socio-Professional Categories (CSP-CH)
- Treiman's Prestige Scale
- The Cambridge Social Interaction and Stratification Scale (CAMSIS)

For a comprehensive description of the different classifications we refer to Bergman and Joye (2001) (<u>https://forscenter.ch/wp-content/uploads/2018/07/indicateurs-position-sociale-en.pdf</u>), and Bergman et al. (2002).

With the constant evolution of the occupational world, these indicators need to be updated from time to time. We are currently making necessary revisions, especially as a result of the change from ISCO-88 to ISCO-08. In Wave 24 we updated the ESeC, the CSP-CH and also the Treiman's Prestige Scale variables, which are now constructed based on the ISO-08 codes. The three other classifications (Wright class structure, Goldthorpe class schema and the Cambridge Social Interaction and Stratification Scale) variables are still under revision and are not included in Waves 21-24. For the Waves 1-20 they are delivered but constructed based on the ISCO-88 codes.

Tables 7 to 9 show the variables used to construct the different classifications. The classification of the respondent's last job (is4laj\$\$), father's occupation and mother's occupation are done in the same way. The following explanation of the construction of the classification for the respondent's current occupation is therefore also applicable to the respondent's last occupation and father's and mother's occupation.

|            | Variable<br>name | profession<br>and<br>sectors | education  | Hierarchical<br>level | Number of<br>employee<br>s of self-<br>employed | status<br>(self-<br>employed,<br>employee,<br>etc.) | gender |
|------------|------------------|------------------------------|------------|-----------------------|---|---|--------|
| WRIGHT3    | WR3MAJ\$\$       | P\$\$W28                     | EDUCAT\$\$ | P\$\$W34              | P\$\$W31  | P\$\$W29  |        |
| GOLDTHORPE | GLDMAJ\$\$       | P\$\$W28                     |            | P\$\$W34              | P\$\$W31  | P\$\$W29  |        |
| EseC       | ESECMJ\$\$       | IS3MAJ\$\$                   |            | P\$\$W34              | P\$\$W31  | P\$\$W29  |        |
| CSP        | CSPMAJ\$\$       | P\$\$W28                     | EDUCAT\$\$ | P\$\$W34              | P\$\$W31  | P\$\$W29  |        |
| TREIMAN    | TR1MAJ\$\$       | IS4MAJ\$\$                   |            | P\$\$W34              | P\$\$W31  | P\$\$W29  |        |
| CAMSIS     | CAIMAJ\$\$       | P\$\$W28                     |            |                       |   |   | SEX    |

|  | Table 7 | Variables | s used to construct | classifications for | r respondent's current | occupation |
|--|---------|-----------|---------------------|---------------------|------------------------|------------|
|--|---------|-----------|---------------------|---------------------|------------------------|------------|

|            | Variable<br>name | Profession<br>and sectors | education  | Hierarchical<br>level | Number of<br>employee<br>s of self-<br>employed | status<br>(self-<br>employed,<br>employee,<br>etc.) | gender  |
|------------|------------------|---------------------------|------------|-----------------------|---|---|---------|
| WRIGHT3    | WR3LAJ\$\$       | P\$\$W28                  | EDUCAT\$\$ | P\$\$W117             | P\$\$W114                                       | P\$\$W112   |         |
| GOLDTHORPE | GLDLAJ\$\$       | P\$\$W28                  |            | P\$\$W117             | P\$\$W114                                       | P\$\$W112   |         |
| ESeC       | ESECLJ\$\$       | IS3LAJ\$\$                |            | P\$\$W117             | P\$\$W114                                       | P\$\$W112   |         |
| CSP        | CSPLAJ\$\$       | P\$\$W111                 | EDUCAT\$\$ | P\$\$W117             | P\$\$W114                                       | P\$\$W112   |         |
| TREIMAN    | TR1LAJ\$\$       | IS4LAJ\$\$                |            | P\$\$W117             | P\$\$W114                                       | P\$\$W112   |         |
| CAMSIS     | CAILAJ\$\$       | P\$\$W111                 |            |                       |   |   | SEX\$\$ |

#### Table 8 Variables used to construct classifications for respondent's last occupation

#### Table 9 Variables used for classifications for father's and mother's occupation

|            | Variable<br>name | profession  | education | Hierarchical<br>level<br>(management,<br>supervision,<br>production) | Number of<br>employees of<br>self-employed | status (self-<br>employed,<br>employee,<br>etc.) |
|------------|------------------|-------------|-----------|--|--|--|
| WRIGHT3    | WA3FAJ\$\$/      | IS3FAJ\$\$  | P\$\$017/ | P\$\$O16/  | P\$\$014/                                  | P\$\$013/  |
|            | WA3MOJ\$\$       | IS3MOJ\$\$  | P\$\$O34  | P\$\$O33   | P\$\$O31                                   | P\$\$O30   |
| GOLDTHORPE | GLDFAJ\$\$/      | IS3FAJ\$\$  |           | P\$\$O16/  | P\$\$014/                                  | P\$\$013/  |
|            | GLDMAJ\$\$       | /IS3MOJ\$\$ |           | P\$\$O33   | P\$\$O31                                   | P\$\$O30   |
| ESeC       | ESECFA\$\$/      | IS3FAJ\$\$/ |           | P\$\$O16/  | P\$\$014/                                  | P\$\$013/  |
|            | ESECMO\$\$       | IS3MOJ\$\$  |           | P\$\$O33   | P\$\$O31                                   | P\$\$O30   |
| CSP        | CSPFAJ\$\$/      | P\$\$012/   | P\$\$017/ | P\$\$O16/  | P\$\$014/                                  | P\$\$013/  |
|            | CSPMAJ\$\$       | P\$\$O29    | P\$\$O34  | P\$\$O33   | P\$\$O31                                   | P\$\$O30   |
| TREIMAN    | TR1FAJ\$\$/      | IS4FAJ\$\$/ |           | P\$\$O16/  | P\$\$014/                                  | P\$\$O13/  |
|            | TR1MOJ\$\$       | IS4MOJ\$\$  |           | P\$\$O33   | P\$\$O31                                   | P\$\$O30   |
| CAMSIS     | CAIFAJ\$\$/      | P\$\$012/   |           |  |  |  |
|            | CAIMOJ\$\$       | P\$\$O29    |           |  |  |  |

#### 5.2 The Wright class structure (Wright III)

The Wright classification (cf. Western and Wright, 1994) is based on three dimensions: authority, expertise, and property. These dimensions form seven categories.

Several choices were made for the operationalization and adaptation of this schema, a few of which are to a certain extent necessarily somewhat arbitrary.<sup>3</sup>

- a) Most cases of self-employment were unproblematic. In some cases, we attributed this status to family members employed in their own family business, as well as to those who considered themselves employees of their own enterprise.
- b) The demarcation between "middle-class" and the "petty bourgeoisie" is often based on whether the respondent has employees. Here, by homogeneity with other classification schemas, we set the minimum qualification criteria to ten employees.
- c) Competence derived from educational attainment are qualified in several ways:

<sup>&</sup>lt;sup>3</sup> This recodification differs slightly from that of Levy et al. (1997).

- i) Directly relating to the occupation: ISCO-88 includes in its occupational classification an explicit reflection on the relations between educational attainment and occupational titles.
- ii) According to educational and training trajectories normally followed by those with a particular occupation as established from the Swiss Population Census of 1990.
- iii) Based on the respondents' attained educational and professional qualifications, whatever the relevance to their occupation.

Technically, the following rules apply:

- a) "Owners/Employers": self-employed and at least 10 employees
- b) "Petty bourgeoisie": self-employed and less than 10 employees
- c) "Managers-Experts": professional leading or supervisory role, as well as an advanced educational attainment;
- d) "Managers": salaried with supervisory position and not yet classified in any of the above categories;
- e) "Professionals": salaried with advanced educational attainment but without supervisory functions;
- f) "Semi-Professionals": salaried with either advanced or middling educational attainment and with middling professional requirements;
- g) "Worker": other employees.

#### 5.3 Erikson, Goldthorpe and Portocarero's class schema

The first Goldthorpe class schema was based on occupation and occupational status (selfemployed, salaried). Originating from Goldthorpe and Hope's prestige scale (1974) and Goldthorpe's subsequent class schema (1987), two levels of classification were developed that included 7 or 36 categories. Further development in conjunction with the CASMIN (Comparative Analysis of Social Mobility in Industrial Countries) project makes the seven-category schema more suitable for comparative investigations, and it has established itself as the most prominent schema for comparative intergenerational mobility studies. The current schema requires information on the respondents' number of employees and supervisory function and is based on ISCO-88.

The SHP provides the adaptation of the Goldthorpe class schema by Ganzeboom and Treiman (2003):

1) Higher controllers;

- 2) Lower controllers;
- 3) Routine non-manual employees;
- 4) Self-employed with employees;
- 5) Self-employed without employees;
- 7) Manual supervisor;
- 8) Skilled manual employees;
- 9) Semi- and unskilled manual employees;
- 10) Farm labour;
- 11) Self-employed farmers.

## 5.4 The European Socio-economic Classification (ESeC)

The European Socio-economic Classification (ESeC) is a European occupational classification based on the Erikson-Goldthorpe-Portocarero Schema.<sup>4</sup>

The primary distinction is between *employers*, who buy the labour of others and assume some degree of authority and control over them; *self-employed* (or *'own account'*) *workers* who neither buy labour nor sell their labour to others; and *employees*, who sell their labour to employers.

Employees are further differentiated according to the employment relations of their occupation; employers are separated by size of establishment and the self-employed according to occupation. Broadly speaking, the kind of contracts employees have depended upon (a) how easily their work may be monitored and controlled by the employer and (b) 'asset specificity', i.e., how specific and crucial their knowledge of technical and organizational issues is to the employer.

The ESeC is based on:

- occupation coded to the minor groups (i.e., 3-digit groups) of the EU variant of the International Standard Classification of Occupations 2008 (ISCO-08)
- details of employment status, i.e., whether an employer, self-employed or employee
- number of employees at the workplace
- whether a worker is a supervisor.

| Table TO The European Socio-economic Classification | Table 10 | The Europe | an Socio-eco | nomic Class | sification |
|---|----------|------------|--------------|-------------|------------|
|---|----------|------------|--------------|-------------|------------|

|    | ESeC Class  | Common Term                       |
|----|---|-----------------------------------|
| 1  | Large employers, higher grade professional, administrative and managerial occupations   | Higher salariat                   |
| 2  | Lower grade professional, administrative and<br>managerial occupations and higher grade<br>technician and supervisory occupations | Lower salariat                    |
| 3  | Intermediate occupations  | Higher grade white collar workers |
| 4  | Small employer and self-employed occupations (excluding agriculture etc)  | Petit bourgeoisie or independents |
| 5  | Self-employed occupations (agriculture etc)   | Petit bourgeoisie or independents |
| 6  | Lower supervisory and lower technician occupations  | Higher grade blue collar workers  |
| 7  | Lower services, sales and clerical occupations  | Lower grade white collar workers  |
| 8  | Lower technical occupations   | Skilled workers                   |
| 9  | Routine occupations   | Semi- and nonskilled workers      |
| 10 | Never worked and long-term unemployed   | Unemployed                        |

<sup>&</sup>lt;sup>4</sup> This classification was developed by a consortium of nine institutes from the UK, Germany, France, the Netherlands, Sweden, Italy and Ireland (<u>https://www.iser.essex.ac.uk/archives/esec</u>)

## 5.5 The Swiss Socio-Professional Categories (CSP-CH)

The CSP-CH (Joye and Schuler, 1995) are based on the occupational coding of the Swiss Federal Office of Statistics, as well as educational achievement and occupational status. The significance of educational attainment may vary according to the details and title of an occupation. For example, a particular employee could be classified as being part of the intellectual professions based on her degree of managerial responsibility, without necessarily having a university education.

|                                    | University   | Technical and<br>Professional | Apprenticeship                         | Compulsory<br>Education or<br>Less |
|------------------------------------|--|-------------------------------|--|------------------------------------|
| Top<br>Executives<br>Self-Employed | 1) top<br>management<br>2) liberal<br>professions      | 3) other self-<br>employed    |  |                                    |
| Wage-Earners                       | 4) academic<br>professions and<br>senior<br>management | 5) intermediate professions   | skilled:<br>6) non-manual<br>7) manual | 8) unskilled                       |

 Table 11 Swiss Socio-Professional Categories

#### 5.6 Treiman's Prestige Scale

Treiman proposes a very general stratification model based on occupational prestige ratings. His work in this area culminates in the construction and validation of the Standard International Occupational Prestige Scale. Using the four nested levels of the International Standard Classification of Occupations (ISCO), Treiman's occupational prestige scores for each occupation within an ISCO level are averaged to produce a score for occupational groups as summarized by ISCO.

The subjectively attributed prestige of a specific occupation is (a) linked to the privilege and power which individuals enjoy based on their occupational titles, (b) invariant across social and cultural groupings, and (c) similar across all complex modern societies.

The Treiman Prestige Scale differs from Wright and Goldthorpe's class schema not only in that it measures subjectively attributed prestige as an indicator of access to structural and functional power, but also because it explicitly models a prestige hierarchy. The prestige scores range between 0 (lowest prestige) and 100 (highest prestige; Treiman, 1977).

# 5.7 The Cambridge Social Interaction and Stratification Scale (CAMSIS)

The Cambridge Social Interaction and Stratification Scale (CAMSIS) is based on the idea that social structure can be expressed by the social distance between individuals. Persons sharing a similar social position, in terms of social class or status group membership, are more likely to socially interact in an equal way with members of the same group than with members of other groups. So, acquaintances, friends and marriage partners will all tend to be chosen much more frequently from within the same group than from without. <sup>5</sup>.

CAMSIS has been developed initially from friendship networks and, subsequently, from cohabiting couples (Stewart, Prandy, and Blackburn 1980). For Switzerland, the Population Census of 1990 was used to examine the probability of co-occurrence of occupational titles between cohabiting couples.

The value allotted to each occupation indicates its position on this hypothetical social axis and, consequently, its distance to others. Subsequently, each occupation of the 4-digit ISCO-88 classification is allotted a CAMSIS score. The current version adjusts for national variations and is sensitive to gender. Other dimensions can be easily accommodated (e.g., ethnicity, geographic region) to incorporate specific research interests and hypotheses, and to improve the correspondence between this measure and the social categories within their context.

### 5.8 Professional integration

Paugam's typology of professional integration (PAUG\$\$R4) is based on a distinction between conditions of employment and conditions of work. The typology distinguishes four types of professional integration (see Paugam, 2000). Secure integration ('intégration assurée') is defined as the combination of job stability and quality of work measured objectively and subjectively. Three forms of integration deviate from this model: *insecure integration* ('intégration incertaine') is the result of unstable job but good working conditions and satisfaction at work; *constrained integration* ('intégration laborieuse') is the product of a stable job, but with work constraints leading to dissatisfaction; and *disqualifying integration* ('intégration disqualifiante') corresponds to the combination of job instability and poor working conditions.

<sup>&</sup>lt;sup>5</sup> For more details, see Bergman, Lambert, Prandy, and Joye (2002).

# 6 Income

# 6.1 Individual income

| Table 12: List of constructed income variables of individuals |                            |   |  |  |
|---|----------------------------|---|--|--|
| Variable  | Gross/<br>net <sup>a</sup> | Description   |  |  |
| I\$\$EMPYG<br>I\$\$EMPYN                                      | gross<br>net               | Income from employment: annual amount<br>Takes into account 13 <sup>th</sup> and 14 <sup>th</sup> month salary, bonuses and gratifications.   |  |  |
| I\$\$INDYG<br>I\$\$INDYN                                      | gross<br>net               | Income from self-employment: annual amount. Takes into account 13 <sup>th</sup> and 14 <sup>th</sup> month salary, bonuses and gratifications if applicable.  |  |  |
| I\$\$EMPMG<br>I\$\$EMPMN                                      | gross<br>net               | Income from employment: monthly amount  |  |  |
| I\$\$INDMG<br>I\$\$INDMN                                      | gross<br>net               | Income from self-employment: monthly amount   |  |  |
| I\$\$OASIY  |                            | State pension for old-age (first pillar), widow(er)s or orphans: annual amount.<br>Includes additional benefits.  |  |  |
| \$\$AIY   |                            | Disability pension: annual amount. Includes additional benefits.  |  |  |
| I\$\$PENY   |                            | Income from pension schemes (second pillar old-age pension): annual amount.<br>Includes additional benefits.  |  |  |
| I\$\$UNEY   |                            | Income from unemployment social insurance: annual amount  |  |  |
| I\$\$WELY   |                            | Income from welfare benefits (social assistance): annual amount   |  |  |
| I\$\$GRAY   |                            | Income from scholarships, grants: annual amount<br>Income from private or public institution  |  |  |
| I\$\$INSY   |                            | Income from any another private or public institution: annual amount  |  |  |
| I\$\$FAMY   |                            | Family or child allowances: annual amount.<br>Might additionally be included in income from employment  |  |  |
| I\$\$PNHY   |                            | Payments received from individuals not in household: annual amount  |  |  |
| I\$\$PIHY   |                            | Payments received from individuals in household: annual amount  |  |  |
| I\$\$CAPY   |                            | Income from capital: annual amount (such as interests, dividends)   |  |  |
| I\$\$RENTY  |                            | Income from letting, sub-letting; annual amount   |  |  |
| I\$\$OTHY   |                            | Other income: annual amount.  |  |  |
|   |                            | For example this might include 3 <sup>rd</sup> pillar, inheritance  |  |  |
|   |                            |   |  |  |
| I\$\$PTOTG  | gross                      | Yearly total personal income: annual amount   |  |  |
| I\$\$PTOTN  | net                        | In most cases, total income has been calculated by adding the different income sources. In case of non-response in any of the income sources (and in some other cases in waves 1 to 5), total income refers to a global assessment of income. Amounts of income sources which represent one-off payments over 12'000 CHF, are not considered in total income. |  |  |
| I\$\$WYG  | gross                      | Income from employment or self-employment: annual amount  |  |  |
| I\$\$WYN  | net                        | Takes into account 13 <sup>th</sup> and 14 <sup>th</sup> month salary, bonuses or gratifications if applicable. From 2002 on: sum of I\$\$EMPY, I\$\$INDY   |  |  |
| I\$\$WMG<br>I\$\$WMN  | gross<br>net               | Income from employment or self-employment: monthly amount   |  |  |
| I\$\$STPY   |                            | Social public transfers: annual amount.<br>From 2002 on: sum of I\$\$UNEY, I\$\$WELY, I\$\$GRAY, I\$\$INSY  |  |  |
| I\$\$STFY   |                            | Income from private persons (informal transfers): annual amount<br>From 2002 on: sum of I\$\$PNHY, I\$\$PIHY  |  |  |
| I\$\$AVSY   |                            | Income from old age or disability pension: annual amount<br>From 2002 on: sum of I\$\$OASIY, I\$\$AIY, I\$\$PENY  |  |  |
| I\$\$OSY  |                            | Other income: annual amount: Might include 3 <sup>rd</sup> pillar, inheritance, income from capital, such as income from wealth, letting, sub-letting   |  |  |
|   |                            | ΓΙΟΠΙ ΖΟ 14 ΟΠ. SUΠΙ ΟΙ ΙΦΦΟΑΡΊ, ΙΦΦΚΕΝΙΙΊ, ΙΦΦΟΙΠΙ   |  |  |

Table 12: List of constructed income variables of individuals

<sup>a</sup>) Net: social security contributions deducted

#### 6.2 Household income

| Variable   | Gross/net                   | Description                              |
|------------|-----------------------------|--|
|            | I\$\$HTYG, gross            | Yearly income from all members           |
|            | I\$\$HTYN, net              | Taxes not deducted                       |
|            | (social security taken into |  |
|            | account where possible)     |  |
|            | I\$\$EQSG, gross            | Yearly household income, equivalised     |
|            | I\$\$EQON, net              | according to SKOS scale 1998.            |
|            | (social security taken into | Taxes not deducted                       |
|            | account where possible)     |  |
|            | I\$\$EQOG, gross            | Yearly household income, equivalised     |
|            | I\$\$EQON, net              | according to modified OECD scale.        |
|            | (social security taken into | Taxes not deducted                       |
|            | account where possible)     |  |
| I\$\$HTAX  |                             | Simulated direct taxes at the municipal, |
|            |                             | cantonal and federal level               |
| I\$\$DISPY |                             | Yearly household disposable income       |

Table 13 List of constructed income variables of households

Equivalised household income takes the size and composition of households into account by converting household income into income of one-person households. To compute equivalised household income, the household income is divided by an equivalence scale. Two different equivalence scales are used in the SHP. Firstly, the modified OECD scale (variables I\$\$EQON and I\$\$EQOG) attributes a weight of 1 to the first adult, a weight of 0.5 to all other household members from 14 years on, and a weight of 0.3 to children up to 14 years. The sum of these weights gives the modified OECD scale. Secondly, the SKOS equivalence scale (Swiss Conference of social assistance) (variables I\$\$EQSN and I\$\$EQSG) attributes a weight of 1 to a 1-person household, 1.53 to a two-person household, 1.86 to a three-person household, 2.14 to a four-person household, 2.42 to a five-person household, 2.70 to a six-person household, 2.98 to a seven-person household and increases by 0.28 to each additional person.

# 7 Geographical information

In addition to the region (REGION\$\$, 7 regions) and the canton (CANTON\$\$, 26 cantons) in which the household resides, different community typologies can be constructed based on the political municipality codes in which the household is located ('communes' or 'Gemeinden'). The SHP has included since the early years of the study the typology proposed by Schuler, Dessemontet and Joye 2005 (116f) distinguishing 22 categories (COM1\_\$\$) and an aggregated version of this variable in 9 categories (COM2\_\$\$). Table 14 provides the names and labels of these variables as well as how COM1\_\$\$ is aggregated into COM2\_\$\$. Although this typology is outdated, it is still provided for longitudinal research purposes.

| Table  | 14 Codina  | of the | community    | / typology                              | variables |
|--------|------------|--------|--------------|---|-----------|
| I GOIO | i i oounig |        | 001111101110 | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Vanabioo  |

|    | COM1 \$\$                                 |   | COM2 \$\$                        |
|----|---|---|----------------------------------|
| 1  | Great urban centres                       | 1 | Centres (1 2 3)                  |
| 2  | Median sized urban centres                | • | 0011103 (1,2,0)                  |
| 2  | Small centres                             |   |                                  |
| 4  | Centre of peripheral region               |   |                                  |
| 5  | Wealthy communes                          | 3 | Wealthy communes (5)             |
| 6  | Tourist communes                          | 5 | Tourist communes (6.7)           |
| 7  | Semi-tourist commune                      | Ŭ |                                  |
| 8  | Communes with homes and asylums           |   |                                  |
| 9  | Labour/iob communes in large central      | 2 | Suburban communes (9 10 12 13)   |
| U  | regions                                   | - |                                  |
| 10 | Suburban residential communes in large    |   |                                  |
|    | central regions                           |   |                                  |
| 11 | Peripheral urban communes in large        | 4 | Peripheral urban communes        |
|    | central regions                           | - | (11.14)                          |
| 12 | Labour/job communes outside large         |   |                                  |
|    | central regions                           |   |                                  |
| 13 | Suburban residential communes outside     |   |                                  |
|    | large central                             |   |                                  |
| 14 | Peripheral urban communes outside large   |   |                                  |
|    | central regions                           |   |                                  |
| 15 | Net immigration communes, moderate or     | 7 | Rural commuter communes          |
|    | high proportion                           |   | (15,16)                          |
| 16 | Native resident communes, moderate or     |   |                                  |
|    | high proportion                           |   |                                  |
| 17 | Communes with industrial and tertiary     | 6 | Industrial and tertiary sector   |
|    | sector employment                         |   | communes (4,8,17,18)             |
| 18 | Communes with industrial employment       |   |                                  |
| 19 | Communes with agricultural and industrial | 8 | Mixed agricultural communes      |
|    | employment                                |   | (19,20)                          |
| 20 | Communes with agricultural and tertiary   |   |                                  |
|    | sector employment                         |   |                                  |
| 21 | Communes with agricultural employment     | 9 | Peripheral agricultural communes |
|    | population                                |   | (21,22)                          |
| 22 | Communes with strongly shrinking          |   |                                  |
|    | population                                |   |                                  |

From this year on, the SHP also provides a more recent Rural-Urban typology following the "<u>Urban-Rural typology 2012</u>" of the Federal Statistical Office. This typology distinguishes three categories. Included is an urban category, labelled "centres", a rural category and an intermediate category labelled "Agglomeration municipalities". This typology is available from Wave 10 onwards.

#### Table 15 Coding of the Urban-Rural typology

|   | COM3_\$\$                    |  |  |
|---|------------------------------|--|--|
| 1 | Centres                      |  |  |
| 2 | Agglomeration municipalities |  |  |
| 3 | Rural municipalities         |  |  |

<u>Other municipality types</u> provided by the Swiss Federal Statistical Office are available for SHP users on request. The municipality codes themselves are not included in the user file to guarantee the anonymity of the respondents. Under certain conditions are the codes available for users of the data. This requires special authorization and is only possible when anonymity of the households can be guaranteed.

#### **9** References

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