

## Appendix Coherence- Cross domain

An in-depth coherence analysis was carried out between the SILC survey and the Household Budget Survey (HBS), which is also conducted by the FSO. This analysis covers the percentage of households receiving the various components, the distribution of amounts above 0 and at-risk-of-poverty rates by individual profile. As the reference year for income in the 2021 SILC survey was 2020, a comparison was made with HBS data from 2020.

The Household Budget Survey is conducted annually and seeks to collect detailed information on households' income and expenditure. The survey samples about 3 400 households, primarily through the use of written questionnaires. The response burden of the HBS is high, explaining why unadjusted response rates are relatively low at less than 40%. Unlike the SILC survey, no register information is reconciled with information gathered during fieldwork. However, in the event of inconsistencies arising during HBS quality controls, householders are contacted again to clear up issues and correct information where appropriate.

### 1. Comparison of SILC21-HBS20 income components

Compared income components are those whose Eurostat definitions are relatively similar in the two surveys. However, HBS goes into more detail about various items of income that may at times be problematic for comparisons. Although the linking of these items to Eurostat components was subject to a coordinated assessment between the SILC survey and the HBS, definition mistakes or discrepancies may still arise.

Table 1 shows the average of core income components for all households (N non-weighted 8605 for the SILC and 3452 for the HBS), while table 2 indicates the proportion of households with a positive amount in relation to an income component, along with the average of values above 0. All results have been calculated with weightings.

Findings from table 1 indicate that, of the 16 income components that were compared, the majority (9) had a similar average (with statistical significance of 95%) in both surveys.

The average amount per household is significantly higher in the SILC for the components *Survivor benefits* PY110G, *Disability benefits* (PY130G), *Pension from individual private plans* (PY080G) and *Family /children-related allowances* (HY050G), whereas the components *Regular inter-household cash transfer received* (HY080G) and *Sickness benefits* (PY120G) are significantly higher in the HBS. None of these represents a significant part in the calculation of the available income.

Significant differences also appear for the second year in a row in the PY050G *Cash benefits or losses from self-employment*.

The differences concerning these components can be seen in Table 2, which this time only shows the average for households receiving the sub-component.

We can see that there was no significant difference between the SILC and the HBS with regard to the average income from employment across all households (table 1). Conversely, analyses carried out on households receiving income (table 2) from employment show significant differences in the percentage of households with a salaried income but a slight difference in the average income from self-employment. The percentage of households with a salaried income (>0) is greater in the SILC than it is in the HBS. However, the percentage with an income from self-employed activity (>0) (PY050G *Cash benefits or losses from self-employment*) is slightly higher in the HBS. Conversely, the average income from self-employment is much higher in the SILC. This may partly be explained by a higher frequency of small amounts declared in the scope of the HBS, PAPI survey that also gives more rubrics for the income. In the SILC, the statutes of the activity (employed or self-employed) according to the CCO register are prioritised. In the HBS, priority is given to the option chosen by the respondent. It is thus possible that a proportion of the respondents classify themselves as self-employed even though they are considered to be employed in the CCO register (for example, employees of their own business) and are thus classified as such for the SILC.

**Table 1: Comparison SILC21-HBS20. Average and confidence interval of income sub-components for all households (with or without income) with weightings, in CHF.** Components for which averages with confidence intervals of 95% do not correspond are outlined in red.

		SILC21			HBS20		
		Confidence interval (95%)			Confidence interval (95%)		
		Average	min	max	Average	min	max
<b>Employment income</b>							
PY010G	Employee cash or near-cash income (Gross)	85 541	82 994	88 089	80 781	77 524	84 037
PY050G	Cash benefits or losses from self-employment	5 393	4 670	6 116	3 808	3 008	4 608
<b>Investment and property income</b>							
HY040G	Income from rental of a property or land	2 952	2 558	3 346	2 403	1 852	2 953
HY090G	Interest, dividends, profit from capital investments in unincorporated business	2 924	1 710	4 139	3 207	1 863	4 551
<b>Transfer income</b>							
PY100G	Old-age benefits	16 805	16 155	17 455	18 392	17 156	19 628
PY110G	Survivor benefits	758	643	874	460	287	634
PY130G	Disability benefits	2 189	1 943	2 434	1 249	972	1 525
PY120G	Sickness benefits	206	145	267	1 659	1 270	2 047
PY080G	Pension from individual private plans	637	529	745	298	195	402
PY140G	Education- related allow ances	83	58	109	70	16	124
HY050G	Family/Children-related allow ances	1 713	1 614	1 812	1 450	1 328	1 573
HY060G	Social exclusion not elsew here classified	2 139	1 851	2 427	1 855	1 456	2 253
HY070G	Housing allow ances	125	72	177	159	90	228
HY080G	Regular inter-household cash transfer received	1 038	893	1 184	1 837	1 458	2 217
<b>Mandatory deductions</b>							
HY130G	Regular inter-household cash transfer paid	1 744	1 557	1 931	1 926	1 591	2 262
HY140G	Tax on income and social contributions	36 059	35 186	36 932	34 408	33 137	35 680

For several income sub-components, the percentage of households receiving a non-zero amount is higher in SILC than in HBS, as shown in Table 2. These are the sub-components *Survivor's benefits* (PY110G), *Disability benefits* (PY130G), *Pension from individual private plans* (PY080G), *Family/Children-related allowances* (HY050G) and *Education related allowances* (PY140G). This can largely be explained by differences in the reference period: the whole of 2020 for the SILC / month of reference for the HBS.

The percentage of households with transfers paid to other households (HY130G) or received from other households (HY080G *Regular inter-household cash transfer received*) is far higher in the HBS, even though the average of the positive amounts is higher in the SILC than in the HBS (significantly for HY130G). However, the average of all households (Table 1) is ultimately higher for the HBS. This can largely be explained by the fact that the irregular transfers between households are integrated into this component for the HBS, whereas in the SILC only the regular transfers are considered.

Most of the differences observed between SILC21 and HBS20 have already been seen in previous years and can be explained by the previously mentioned arguments. However, these arguments alone cannot explain the important differences observed for the second year in a row, particularly on income from employment (PY010G) percentage or self-employment (PY050G). We are therefore seeking for further explanations.

**Table 2 SILC21-HBS20. Proportion (%) of households with income sub-component (>0) and average (in CHF) thereof where this is non-zero.** Sub-components for which ratios or averages with confidence intervals of 95% do not correspond are outlined in red.

		SILC21						HBS20					
		% of households w with income > 0			Average	Confidence interval		% of households w with income > 0			Average	Confidence interval	
		Confidence interval				(95%)		Confidence interval				(95%)	
		%	min	max		min	max	%	min	max		min	max
Employment income													
PY010G	Employee cash or near-cash income	73.8%	72.8%	74.8%	115 918	112 730	119 106	68.0%	66.1%	69.9%	118 814	115 104	122 524
PY050G	Cash benefits or losses from self-employment	10.5%	9.7%	11.3%	51 155	45 479	56 832	12.7%	11.3%	14.0%	30 087	24 886	35 289
Investment and property income													
HY040G	Income from rental of a property or land	10.3%	9.6%	11.0%	28 675	25 350	31 999	9.5%	8.4%	10.6%	25 235	20 214	30 256
HY090G	Interest, dividends, profit from capital investments in unincorporated business	68.7%	67.5%	69.8%	4 257	2 490	6 024	72.3%	70.4%	74.1%	4 437	2 581	6 293
Transfer income													
PY100G	Old-age benefits	31.0%	29.9%	32.0%	54 236	53 087	55 384	31.9%	30.1%	33.7%	57 645	55 351	59 939
PY110G	Survivor benefits	3.1%	2.7%	3.5%	24 155	22 237	26 073	1.3%	0.9%	1.7%	35 250	28 013	42 487
PY130G	Disability benefits	8.6%	7.8%	9.4%	25 486	23 661	27 311	4.6%	3.7%	5.5%	27 046	23 219	30 872
PY120G	Sickness benefits	1.4%	1.2%	1.7%	14 408	10 944	17 871	4.2%	3.3%	5.0%	39 576	34 898	44 254
PY080G	Pension from individual private plans	2.7%	2.4%	3.1%	23 379	20 466	26 291	2.4%	1.8%	3.1%	12 268	9 282	15 254
PY140G	Education- related allow ances	1.4%	1.0%	1.8%	5 987	4 626	7 349	0.7%	0.3%	1.0%	10 237	5 500	14 975
HY050G	Family/Children-related allow ances	28.0%	26.8%	29.2%	6 127	5 925	6 329	24.6%	22.9%	26.2%	5 900	5 594	6 207
HY060G	Social exclusion not elsew here classified	25.2%	24.0%	26.4%	8 474	7 491	9 457	19.8%	18.1%	21.4%	9 390	7 575	11 206
HY070G	Housing allow ances	1.3%	0.9%	1.7%	9 519	7 557	11 481	1.8%	1.2%	2.4%	8 782	6 691	10 872
HY080G	Regular inter-household cash transfer received	7.8%	7.1%	8.5%	13 263	11 769	14 758	16.2%	14.8%	17.7%	11 330	9 245	13 415
Mandatory deductions													
HY130G	Regular inter-household cash transfer paid	15.6%	14.6%	16.6%	11 188	10 102	12 274	27.0%	25.3%	28.7%	7 145	5 981	8 308
HY140G	Tax on income and social contributions	100.0%	100.0%	100.0%	36 059	35 186	36 932	99.9%	99.8%	100.1%	34 427	33 155	35 699