

Intermediate Quality Report

Swedish 2008 EU-SILC (Cross Sectional Survey)

(Version 1)

Statistics Sweden

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1. Common cross-component European Union indicators based on the cross-component of EU-SILC 2008

The Swedish EU-SILC 2008 cross-sectional has been carried during 2008 over all the twelve months as an integrated part of the Swedish survey of living conditions (ULF) now EU-ULF. The total micro data and files were transmitted to Eurostat and contain all 2008 cross-sectional indicators stipulated in the regulation EG 28/2004. These EU-SILC indicators are included in this intermediate quality report for SILC operation 2008.

1.1 Cross – component indicators EU-SILC 2008

Table 1. At-risk-of-poverty rate after social transfers, broken down by age and gender.

Gender	Age	Year 2008
both	Total	12
	< 18 years	13
	>18 years < 64 years	11
	> 65 years	16
male	Total	11
	>18 years < 64 years	11
	> 65 years	10
female	Total	13
	>18 years < 64 years	11
	> 65 years	21

Table 1.2. At-risk-of-poverty rate after social transfers, broken down by most frequent activity status and gender.

Gender	Working status	Year 2008
Both	Total population	
	Employment	7
	Non employment	21
	Unemployment	38
	Retired	16
	Inactive population Other	31
Male	Total population	
	Employment	7
	Non employment	18
	Unemployment	39
	Retired	11
	Inactive population - Other	35
Female	Total population	
	Employment	6
	Non employment	23
	Unemployment	37
	Retired	20
	Inactive population - Other	28

Table 1.3 At- risk- of- poverty rate after social transfers, broken down by household types.

Household type	Year 2008
Total	12
Single female	16
Single male	17
2 adults younger than 65 years	18
2 adults, at least one aged 65 years and over	19
2 adults with 1 dependent child	23
2 adults with 2 dependent children	24
2 adults with 3 or more dependent children	25
3 or more adults	20
3 or more adults with dependent children	26
Households without dependent children	13
Households with dependent children	21
1 adult younger than 64 years	14
1adult older than 65 years	15
Single parent with dependent children	22

Table 1.4 At- risk- of- poverty rate after social transfers, broken down by accommodation tenure status and gender.

Status	Gender	Year 2008
Owner	both	7
	male	7
	female	8
Rent	both	23
	Male	22
	female	23

Table 1.5 At- risk- of- poverty rate after social transfers, broken down by work intensity of the household.

Work intensity (WI)	Household type	Year 2008
Household with WI = 0	Households without dependent children	26
Household with WI = 0	Households with dependent children	67
Household with $0 < WI < 1$	Households without dependent children	14
Household with $0 < WI < 1$	Households with dependent children	39
Household with WI = 1	Households without dependent children	6
Household with WI = 1	Households with dependent children	5

Table 1.6 At- risk- of- poverty threshold (euros)

Household type	Year 2008
Single person	12177
Two adults with two children younger than 14 years	25572

Table 1.7 Inequality of income distribution S80/20 ratio.

Income distribution S80/20 year 2008	3,5
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Table 1.6 Relative median at-risk-of-poverty gap broken down by gender (%).

Gender	Year 2008
Total	18
Males	20
Females	17

Table 1.7 Dispersion around the risk- of- poverty threshold year 2008 .

Gender	At risk of poverty rate (cut-off point: 40% of median)	At risk of poverty rate (cut-off point: 50% of median)	At risk of poverty rate (cut-off point: 70% of median)
Total	4	7	21
Males	4	6	19
Females	4	7	22

Table 1.8 At-risk-of-poverty-rates before social transfers except old age and survivors benefits.

Gender	Age	Year 2008
Both	Total	29
	< 18 years	34
	>18 years < 64 years	27
	> 65 years	26
Male	Total	27
	>18 years < 64 years	26
	> 65 years	16
female	Total	31
	>18 years < 64 years	28
	> 65 years	30

Table 1.9 At-risk-of-poverty-rates before social transfers including old age and survivors benefits.

Gender	Age	Year 2008
Both	Total	42
	< 18 years	35
	>18 years < 64 years	31
	> 65 years	96
Male	Total	40
	>18 years < 64 years	29
	> 65 years	94
Female	Total	45
	>18 years < 64 years	33
	> 65 years	97

Table 1.10 Inequality of income distribution Gini Coefficient.

Gini coefficient 2008.	24
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1.2 Others indicators

1.2.1 Equivalised disposable income:

Equivalised disposable Income	Sw.kr. mean year 2008
By household size	
1 household member	323367
2 household members	369 221
3 household members	310494
4 and more household members	262683
By age groups	
< 25	241009
25 - 34	354111
35 - 44	414965
45 - 54	400667
55 - 64	402575
65 +	275134
By gender	
Male	355912
Female	331875
Total	326 407

1.2.2 The unadjusted gender pay gap

The calculation of unadjusted gender pay gap is based on other sources than EU-SILC (Swedish's wage statistics).

2. Accuracy

2.1 Sample design

2.1 Type of sample design

Every year a systematic sample is drawn from the register of total population (TPR). This is sorted by age and covers the entire population according to the national registration. Such sample is regarded as simple random sample. The SILC 2008 sample was drawn in November 2007 and consisted of four panels, panel 5 to 8. Panel 5 was originally drawn in 2005 and every year complemented with people who had grown into the population (new 16 aged and immigrants). Most of the respondents were answering for the 4th time. In the same manner panel 6 and panel 7 were originally drawn in 2006 and 2007 respectively and complemented with new 16 aged and emigrants. Panel 8 was included for the first time in 2007.

2.1.2 Sample unit

According to EU-SILC definitions the units of study of interest are both the household and the individuals or household member living in the same household as the selected person. The Sweden survey is doing in selected person.

2.1.3 Stratification and sub-stratification criteria

No stratification was applied in the sampling procedure.

2.1.4 Sample size (households=selected persons).

Table 2.1 Sample size EU-SILC 2008

	Total	Percent
Respondent	7491	73,31
Not found	1122	10,98
Refused	1498	14,66
Over-coverage	107	1,05
TOTAL	10218	100,00

2.1.5 Sample Selection

The sample was drawn as a systematic sample from the frame (RTP) sorted by age order.

2.1.6 Sample distribution over time

The EU-SILC sample 2008 was drawn in November 2007 and carried from 12 January to 31 December 2008

2.1.7 Renewal of sample: Rotation groups

The sample consists of four rotation groups (panels) as described above in 2.1.

2.1.8 Weightings – Design factor and non-response adjustment

2.1.8.1 Design factor

For the estimation procedure the sample from each panel is divided into 2 x 8 stratum by sex and age-groups. Post-stratification refers to sex, age 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84 and 84+ years.

Within each post strata the design-weights are computed as the inverse of the probability of inclusion after that the design-weights are adjusted according to the over-coverage.

2.1.8.2 Non-response adjustment

The final cross sectional weight are computed as the adjusted population-size in each post strata divided by the number of respondents for each panel and finally divided by 4.

2.1.8.3 Adjustment to external data

From the register of total population we compute the number of individuals and the number of households according to married people within each stratum when the sample was draw. We have non possibilities to calibrate with external data

2.1.8.4 Final cross sectional weight

n.a

2.1.9 Substitutions

Substitution has not been applied.

2.1.9.1 n.a

2.1.9.2 n.a

2.1.9.3 n.a

2.2 Sampling errors

Sampling errors refers to the variability of estimates in the random sample. The guidelines of the QR ask reporting on the effective sample size and the standard errors of the common tree cross component indicators and for equivalised disposable income (gender pay gap is not applicable).

Table 2.2. 1a At-risk-of-poverty rate after social transfers, broken down by age and gender

– Value, achieved sample size and standard error -

Gender	Age	Indicator	Achieved size	Standard error
Both	Total	12	18825	0,24
	< 18 years	13	4815	0,48
	>18 years < 64 years	11	11534	0,29
	> 65 years	16	2476	0,74
Male	Total	11	9430	0,32
	>18 years < 64 years	11	5760	0,41
	> 65 years	10	1190	0,87
Female	Total	13	9395	0,35
	>18 years < 64 years	11	5774	0,41
	> 65 years	21	1286	1,14

Table 2.2.1b At-risk-of-poverty rate after social transfers, broken down by most frequent activity status and gender.

–Value, achieved sample size and standard errors–

Gender	Working status	Indicator	Achieved sample size	Standard error
Both	Employment	7	8881	0,27
	Non employment	21	4724	0,59
	Unemployment	38	296	2,82
	Retired	16	3200	0,65
	Inactive population - Other	31	1228	1,32
Male	Employment	7	4604	0,38
	Non employment	18	2139	0,83
	Unemployment	39	154	3,93
	Retired	11	1462	0,82
	Inactive population - Other	35	523	2,09
Female	Employment	6	4277	0,36
	Non employment	23	2585	0,83
	Unemployment	37	142	4,05
	Retired	20	1738	0,96
	Inactive population - Other	28	705	1,69

Table 2.2.1c At-risk- of- poverty rate after social transfers, broken down by household types.*-Value, achieved sample size and standard errors-*

Household type	Indicator	Achieved sample	Standard error
Total	12	17622	0,24
Single female	16	898	1,22
Single male	17	730	1,39
2 adults younger than 65 years	18	3310	0,67
2 adults, at least one aged 65 years and over	19	2132	0,85
2 adults with 1 dependent child	23	2199	0,90
2 adults with 2 dependent children	24	3732	0,70
2 adults with 3 or more dependent children	25	2171	0,93
3 or more adults	20	631	1,59
3 or more adults with dependent children	26	1012	1,38
Households without dependent children	13	7701	0,38
Households with dependent children	21	9921	0,41
1 adult younger than 64 years	14	1000	1,10
1 adult older than 65 years	15	597	1,46
Single parent with dependent children	22	807	1,46

Table 2.2.1.a Equivalised disposable income*-Value, achieved sample size and standard error*

Mean, total number of observations and standard error for equivalised disposable income Cross-sectional 2008 (households)			
	Mean Swe. kr.	Achieved sample	Standard error
Total household gross income	412 482	7 452	3 813
Total disposable household income	293 825	7 452	2 443
Total disposable income before social transfers other than oldage and surv. benef.	248 299	7 452	2 496
Total disposable income before social transfers including oldage and surv. benef.	183 261	7 452	2 863

2.3 Non-sampling errors

2.3.1 Sampling frame and coverage errors

The sampling frame is the (TRP) Total Population Register of Sweden. TPR is updated more or less every day. The main outlines for organization of population statistics is according to Swedish law, the main rule is that all persons residing in the country shall be registered at the property unit in the parish where they reside.

Since 1 July 1991, local registration functions are performed by the Tax Offices. Between 1686 and 1991, the Parish Offices of the Church of Sweden carried out the local work. A major means of identifying any person is the personal identity number that is assigned to every individual registered in the Population Registration System. The number follows a person from birth to death and is entered in most personal registers in Sweden, making it possible to identify individuals in different administrative materials and collate data. The personal identity number consists of ten digits. The first six digits show the year, month and day of birth. The next three digits are the birth number which is odd for men and even for women. The last digit is a checking digit.

As part of the partial computerization of Sweden's continuous population registration in 1966, Statistics Sweden was granted permission to set up and maintain a register of the entire national population, referred to as the Total Population Register (TPR).

The vital statistics are based on notifications of births, deaths, changes in marital status, and changes in citizenship, internal migration, immigration and emigration. The TPR receives these daily from the Tax Authorities. The notifications relate to the registered population. Thus, vital statistics are based on the National Registration and consequently conform to its concepts and definitions.

Received information is checked mechanically with respect to the validity of the codes and the logical contents of the information and quality tests comprises, among other things, regional codes, connections between age and marital status, etc. Beginning in 1998 the cut-off date is 31 January in the year after that the event took place. The change in cut-off date in 1998 has no effect on comparisons between years.

Over-coverage consists of people who have died and people who have left the country but are still registered in Sweden. The sample is drawn several months before the fieldwork start. However a check is

made close to the start (the sample is matched to TPR) and people who have died since the sample was drawn are excluded. People who die after that point are registered by the interviewers.

Over-coverage in terms of people who have left Sweden permanently but are still registered in TPR is more difficult to discover. Recent attempts to estimate the size of this over-coverage have given the figure 35 000. Applied on EU-SILC this means 30 individual of which many are discovered by the interviewers. The error is negligible.

If we regard TPR as our population under-coverage by definition does not exist. There are of course people who reside in Sweden illegally or while waiting for residence permit.

2.3.2 Measurement and processing errors

2.3.2.1 Measurement errors

The questionnaire: Most of the EU-SILC questions refer to the present, for which memory errors can not constitute a major source of error. But there are questions about frequency during a longer reference period that are more complicated. .

The questions in the EU-SILC protocol are in most cases not very difficult to answer. It is fairly certain that some questions are interpreted differently by different persons. Particular caution should be observed of responses to questions relating to attitudes and frequency in the interpretation. The EU-SILC module 2008 was difficult to make in Sweden, the Swedish people is very restrictive in response of the bank account and financial assets as well indebtedness.

Interviews training and efficiency: Following a basic introductory course in survey methods, new interviewers participate in an additional one-day course that includes approximately six ours of intensive training (ULF including EU-SILC). The various sections of the interview protocol are thoroughly reviewed and practice in handling as well as certain complicated questions is provided and discussed. The interviewer may miss-understand certain instructions or responses, which contributes to the survey's systematic error level. Each interviewer conducts on average roughly 40 interviews per year. Systematic mistakes by an occasional interviewer may not distort the survey data to any great extent, but it is not possible to specify how much error of that sort occurs. The interviewer's personality and behaviour may influence the responses, particularly with respect to "subjective" questions, such as those relating to attitudes. In some cases interview questions are not presented properly. To the extent that such mistakes cannot subsequently be corrected, there is an increase in partial response.

The respondent may disremember, provide consciously or unconsciously distorted responses or may simply be unable to answer questions.

The mode: The telephone interview mode CATI was the main method use in SILC 2008. The interview form has been specially designed for this type of survey. Telephone interviews whit computer aid CATI is now currently used as the main way to make interviews. Applied on appropriate questions experience says that indirect interviews can be an efficient method to collect information but is still controversy of this and twp projects about the measures, the consequences and the results of the new sampling way of data in the Swedish survey ULF are ongoing and the results will be come soon.

2.3.2.2 Processing errors

Data are checked interactively (values, syntax, logics) as an integrated part of the data entry process. We have developed new software for checking data entries and codification which allowed having files in the EU-SILC format using and following the Eurostat control program för checking and sending the data. All components necessary to derive Gross total income, disposable income etc. are collected from administrative registers. No imputations have been applied for these indicators.

2.3.3 Non-response errors

2.3.3.1 Achieved sample size household and persons. (In Sweden selected person = household).

	Total	Percent
Respondent	7491	73,31
Not found	1122	10,98
Refused	1498	14,66
Over-coverage	107	1,05
TOTAL	10218	100,00

2.3.3.2 Unit non response- The original sampled individuals

The panels during the 2008 SILC operation.

	5	%	6	%	7	%	8	%	Total	%
Respondent	1729	75,30	1676	72,74	2179	73,69	1907	71,66	7491	73,31
Not found	252	10,98	255	11,07	319	10,79	296	11,12	1122	10,98
Refused	290	12,63	352	15,28	429	14,51	427	16,05	1498	14,66
Over-coverage	25	1,09	21	0,91	30	1,01	31	1,16	107	1,05
TOTAL	2296	100	2304	100	2957	100	2661	100	10218	100

■ Household non response rate :

Ra 0,92547

Rh 0,80017

NRh = (1 - (Ra*Rh))*100 = 25,94

■ Individual non response rate :

Rp = 1

NRp = (1-(Rp))*100 = 0

■ -- Overall individual non response rate (*NRp)

n,a - Interview only whit the selected respondent see NRp.

2.3.3.3 Distributions of households = persons (original units) EU-SILC 2008

	5	6	7	8	Total
Respondent	1729	1676	2179	1907	7491
Not found	252	255	319	296	1122
Refused	290	352	429	427	1498
Over-coverage	25	21	30	31	107
Total	2296	2304	2957	2661	10218

2.3.3.3a Distribution of households = individuals by contact at address DB120

Contact at address			
DB120		frequency	cumulative
Address contacted (11)		9313	9313
Address not located (21)		745	10058
Address unable to access (22)		5	10063
Address does not exist (23)		107	10170

2.3.3.3b Distribution of households = individuals by questionnaire DB130

Household Quest result			
DB130		Frequency	cumulative
Quest completed (11)		7452	7452
Refusal to cooperate (21)		1490	8942
Household not found (22)		52	8994
Household unable to respond (23)		272	9266
Others reasons (24)		47	9313

2.3.3.3c Distribution of households by degree of urbanisation DB 100

Degree of Urbanisation			
DB100		Frequency	cumulative
Densely pop, Area (1)		2270	2270
Intermediate area (2)		1437	3707
Thinly pop, Area (3)		6466	10173

2.3.3.3c Distribution of households by DB 135 (household interview acceptance)

DB 135 Household interview acceptance

Household interview acceptance			
DB 135		Frequency	cumulative
1		7452	7452
Missing			2721
Total			10173

2.3.3.4 Distribution of substituted unit

Not applicable

2.3.3.5 Item non response

Item non-response of observations for income components		
Cross-sectional sample 2007 (persons or households)		
	% of persons 16+ having received amount	% of persons 16+ with missing values
Income Components		
employee cash or near cash income net	98,3	1,7
non-cash employee income net	98,3	1,7
contributions to individual private pension plans net	98,3	1,7
cash benefits or losses from self- employment net	98,3	1,7
value of goods produced by own- consumption net	98,3	1,7
pension from individual private plans net	98,3	1,7
unemployment benefits net	98,3	1,7
old-age benefits net	98,3	1,7
survivor' benefits net	98,3	1,7
sickness benefits net	98,3	1,7
disability benefits net	98,3	1,7
education-related allowances net	98,3	1,7
employee cash or near cash income gross	98,3	1,7
non-cash employee income gross	98,3	1,7
contributions to individual private pension plans gross	98,3	1,7
cash benefits or losses from self- employment gross	98,3	1,7
value of goods produced by own- consumption gross	98,3	1,7
pension from individual private plans gross	98,3	1,7
unemployment benefits gross	98,3	1,7
old-age benefits gross	98,3	1,7

survivor' benefits gross	98,3	1,7
sickness benefits gross	98,3	1,7
disability benefits gross	98,3	1,7
education-related allowances gross	98,3	1,7

2.3.3.6 Total item non response

	Total	Percent
Respondent	7491	73,31
Not found	1122	10,98
Refused	1498	14,66
Over-coverage	107	1,05
TOTAL	10218	100,00

The data file on individuals contains information for all respondent households, During the interview we ask for which persons who in fact live in the household of the selected person (to detect differences from the TPR), This correction is only possible to make for respondent households. Response rate is not possible to calculate as household composition for non-response households is not completely known.

2.4 Mode of data collection

The main data collection method was telephone interview (CATI). When we contact the selected individuals, we offer the possibility of face-to-face interview as a second alternative if the respondents prefer this for practical reasons. This strategy we use to avoid non response as much as possible,

2.5 Interview duration

Interview duration was approximately 18 minutes per household, (Computed Aid Telephone Interview).

3. Comparability

3.1 Basic concepts and definitions

The reference population

- Reference population is the whole Swedish population except short term migration, people who stay in Sweden 3-12 months, is not covered.

Private household definition

- The regulation definition is applied.

The household membership

- The regulation definition is applied.
- The income reference period used is: Year N – 1.
- The period for taxes on income and social insurance contributions is: Year N-1.
- The lag between the income reference period and current variables.
- The field work is carried out during January-December year N.

The total duration of the data collection of the sample

- The data collection was 12 month, January-December.

The basic information on activity status during the income reference period

- The twelve calendar months preceding the month of the interview.

3.2 Components of income

3.2.1 Differences between the national definitions and standard EU-SILC definitions.

Only minor deviations with little impact on the results:

- Non-cash employee income includes more than company car (housing cost/ interest on loans below market price etc).
- Regular inter-household cash transfers paid/received do only consider transactions between parents not living together, other types of alimonies or cash transfers are not included.
- Imputed rent (HY030) was calculating by using variables HH010, HH020, HH030 and a variable based on regional classifications described. The dwelling costs were imputed from our national household budget survey and our national housing survey.

3.2.2 The source or procedure used for collection of income variables

The income variables as well as wealth and taxes is collected by administrative registers and one of the important source is the register of The Swedish National tax Agency and others databases and registers in Swedish Statistics .

3.2.3 The form in which income variables at component level have been obtained

The income variables was obtained gross but exclusive of employers' social contributions.

3.2.4 The method used for obtaining income target variables in the required format

The components were gross and available from administrative registers whit the exception of employers' social contribution

4. Coherence

4.1 Comparison of income target variables

The EU-SILC income information is collected from the different administrative sources covering the whole population; the non-response bias has little impact on the estimates. The source of income components is the registers in Swedish Statistics.