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The 2011 cross-sectional component

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1. Common cross-sectional European Union indicators

1.1 Common cross-sectional EU indicators

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[OV-1a] At-risk-of-poverty rate (by age and gender)

age	sex	unit	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	1000PERS	1121.2	1215.1	1212.1	1333.4	121.3	121.353	150.624
		PC_POP	12.2	13.3	12.9	14	1.1	1.136	1.214
	M	1000PERS	514.6	547.6	530.8	576.1	45.3	45.297	45.152
		PC_POP	11.3	12	11.4	12.2	0.8	0.868	0.651
	F	1000PERS	606.6	667.5	681.2	757.3	76.1	76.056	105.471
		PC_POP	13	14.5	14.3	15.7	1.4	1.390	1.758
Y18-64	T	1000PERS	621.3	674	671.3	710.2	38.9	38.920	54.673
		PC_POP	11.2	12.1	11.9	12.5	0.6	0.548	0.766
	M	1000PERS	316.8	337.3	334.5	342.1	7.6	7.574	12.579
		PC_POP	11.4	12	11.8	12	0.2	0.134	0.234
	F	1000PERS	304.5	336.7	336.7	368.1	31.4	31.346	42.094
		PC_POP	11	12.1	12.1	13	0.9	0.967	1.304
Y_GE65	T	1000PERS	222.5	283.9	265.8	317.8	52	52.007	60.371
		PC_POP	15	17.7	15.5	18.2	2.7	2.697	2.123
	M	1000PERS	56.7	73.2	59	74.8	15.8	15.759	11.798
		PC_POP	8.8	10.4	7.8	9.8	2	2.040	0.834
	F	1000PERS	165.9	210.7	206.7	243	36.3	36.247	48.572
		PC_POP	19.7	23.6	21.6	24.7	3.1	3.046	3.045
Y_LT18	T	1000PERS	277.4	257.2	275	305.5	30.5	30.426	35.580
		PC_POP	12.9	13.1	13.1	14.5	1.4	1.416	1.497

li02 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[SI-S1c] At-risk-of-poverty rate, by most frequent activity status and by gender

wstatus	sex	age	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
EMP (Employment)	T	Y_GE18	6.8	6.9	6.5	6.8	0.3	0.355	0.115
	M	Y_GE18	7.2	7.2	6.3	6.9	0.6	0.568	-0.008
	F	Y_GE18	6.3	6.6	6.7	6.8	0.1	0.121	0.250
NEMP (Non employment)	T	Y_GE18	20.2	23.6	22.2	24	1.8	1.834	2.018
	M	Y_GE18	17.7	20.3	19.1	19.3	0.2	0.198	0.226
	F	Y_GE18	22	26.2	24.6	27.6	3	3.033	3.354
UNE (Unemployment)	T	Y_GE18	39.2	39	36.3	38.4	2.1	2.177	0.274
	M	Y_GE18	41.6	42.1	40.6	34.5	-6.1	-6.126	-6.899
	F	Y_GE18	36.7	34.8	30.8	42.9	12.1	12.048	8.777
RET (Retired)	T	Y_GE18	14.9	17.6	15.6	18.9	3.3	3.395	2.916
	M	Y_GE18	10.1	10.4	8.2	10.9	2.7	2.676	1.348
	F	Y_GE18	18.5	23.2	21.2	25.1	3.9	3.879	4.117
INAC_OTH (Inactive population - Other)	T	Y_GE18	32.1	33.4	31.7	30.7	-1	-1.003	-1.669
	M	Y_GE18	35.7	37.2	35.1	33	-2.1	-2.098	-2.996
	F	Y_GE18	29.5	30.9	29.5	29.3	-0.2	-0.195	-0.697
NSAL	T	Y_GE18	.	18.1	14	17.5	3.5	3.465	1.422
	M	Y_GE18	.	18	13.7	15.7	2	2.007	-0.144
	F	Y_GE18	.	18.4	14.9	22.2	7.3	7.325	5.546
SAL	T	Y_GE18	.	5.8	5.8	5.8	0	.	-0.015
	M	Y_GE18	.	5.7	5.4	5.7	0.3	0.227	0.086
	F	Y_GE18	.	6	6.2	6	-0.2	-0.231	-0.121

li04 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[SI-S1a] At-risk-of-poverty rate, by household type

hhtyp	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	12.2	13.3	12.9	14	1.1	1.130	1.213
HH_NDCH (Households without dependent children)	13.2	15.2	14.4	15.5	1.1	1.138	1.240
A1_LT65 (One adult younger than 65 years)	24	26.7	26.7	26.7	0	.	0.833
A1_GE65 (One adult 65 years or older)	26.8	33.1	31.3	35.7	4.4	4.374	5.233
A1F (Single female)	27.4	33.1	32.9	35.5	2.6	2.581	4.323
A1M (Single male)	22.3	24.4	23.4	24	0.6	0.677	0.682
A2_2LT65 (Two adults younger than 65 years)	7.3	6.6	7.1	7.3	0.2	0.193	0.266
A2_GE1_GE65 (Two adults, at least one aged 65 years and over)	6.1	5.9	4.9	6.6	1.7	1.621	0.913
A_GE3 (Three or more adults)	4.5	4.5	5.5	5.5	0	.	0.715
HH_DCH (Households with dependent children)	11.2	11.2	11.3	12.5	1.2	1.164	1.243
A1_DCH (Single parent with dependent children)	26.8	28.9	33.1	35.9	2.8	2.851	6.344
A2_1DCH (Two adults with one dependent child)	8.9	7.1	6	8.6	2.6	2.523	1.221
A2_2DCH (Two adults with two dependent children)	5.5	5.1	6.9	6.6	-0.3	-0.373	0.706
A2_GE3DCH (Two adults with three or more dependent children)	13.3	14.5	12.3	15.4	3.1	3.124	2.096
A2	6.9	6.3	6.1	6.9	0.8	0.824	0.519
A_GE2_DCH	8.9	8.4	8.2	9.3	1.1	1.063	0.791
A_GE2_NDCH	6.6	6.2	6.1	6.8	0.7	0.740	0.518
A_GE3_DCH (Three or more adults with dependent children)	12.5	12.8	10.7	11.4	0.7	0.733	-0.573

li03 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[SI-S1d] ARPR, by accommodation tenure status gender and age groups

age	sex	TENURE	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	OWN	7	8.4	7.2	7.6	0.4	0.465	0.091
		RENT	23.4	24.2	26.4	28.4	2	2.006	3.723
	M	OWN	6.2	7.5	5.9	6.2	0.3	0.289	-0.318
		RENT	23.2	22.8	25.4	26.6	1.2	1.204	2.768
	F	OWN	7.9	9.4	8.4	9.1	0.7	0.619	0.492
		RENT	23.5	25.5	27.3	30	2.7	2.776	4.600
Y18-64	T	OWN	5.3	7	5.5	5.7	0.2	0.114	-0.279
		RENT	22.9	22.5	25.7	26.6	0.9	0.892	2.923
	M	OWN	5.2	7.1	5.6	5.6	0	.	-0.402
		RENT	23.4	21.9	25.4	25.2	-0.2	-0.210	1.594
	F	OWN	5.3	6.9	5.5	5.8	0.3	0.260	-0.156
		RENT	22.3	23.2	26.1	28.1	2	2.007	4.257
Y_GE60	T	OWN	10	11	10.6	13	2.4	2.390	2.462
		RENT	16.8	22.5	19	21.2	2.2	2.242	1.804
	M	OWN	5.7	6.6	5.8	8	2.2	2.234	1.960
		RENT	11.3	16.7	13.7	14.1	0.4	0.458	0.253
	F	OWN	14	15.1	15.1	17.5	2.4	2.404	2.768
		RENT	20.2	26.2	22.2	26	3.8	3.818	3.137
Y_GE65	T	OWN	13.2	13.7	13	15.6	2.6	2.648	2.308
		RENT	18.5	25.9	20.8	23.5	2.7	2.687	1.799
	M	OWN	7.5	7.1	5.8	8.4	2.6	2.583	1.581
		RENT	12.4	19.7	13.6	13.5	-0.1	-0.034	-1.708
	F	OWN	18.3	19.8	19.5	21.8	2.3	2.323	2.632
		RENT	21.8	29.4	24.9	29.6	4.7	4.678	4.221
Y_GE75	T	OWN	22.5	22.8	22.5	27	4.5	4.504	4.417
		RENT	21.3	32.1	24.6	27.6	3	3.010	1.647
	M	OWN	11.4	11.6	10.7	14.5	3.8	3.774	3.263
		RENT	13.6	24	11.2	13.7	2.5	2.527	-2.564
	F	OWN	30.9	32.2	31.8	36.7	4.9	4.816	5.024
		RENT	25	36	30.3	34.4	4.1	4.183	4.023
Y_LT18	T	OWN	7.2	8.2	6.8	6.3	-0.5	-0.432	-1.059
		RENT	29.2	29.1	34.5	39.5	5	5.000	8.556

li08 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[OV-1] At-risk-of-poverty threshold (illustrative values)

hhtyp	currency	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
A1 (Single person)	EUR	12344	12749	11825	13504	1679	1678.49	1197.87
	NAC	114183	122580	125575	128790	3215	3215.54	8010.94
	PPS	10680	11258	10897	11102	205	204.28	156.67
A2_2CH_LT14 (Two adults with two children younger than 14 years)	EUR	25922	26772	24833	28358	3525	3524.82	2515.53
	NAC	239784	257418	263707	270460	6753	6752.64	16823.0
	PPS	22427	23642	22884	23313	429	429.00	329.01

li01 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[OV-2] Inequality of income distribution S80/S20 income quintile share ratio

age	indic_il	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	S80_S20	3.5	3.7	3.5	3.6	0.1	0.067	0.028
Y_GE65	S80_S20	3.6	3.2	3.1	3.3	0.2	0.226	0.040
Y_LT65	S80_S20	3.4	3.7	3.6	3.6	0	.	0.024

di11 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[OV-1b] Relative median at-risk-of-poverty gap (by age and gender)

age	sex	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	18	20.3	19.7	18.5	-1.2	-1.165	-0.773
	M	20.1	22.1	22.9	19.3	-3.6	-3.512	-2.340
	F	17	17.8	16.8	17.9	1.1	1.049	0.666
Y18-64	T	23.7	24.8	25.5	21.9	-3.6	-3.629	-2.750
	M	24.1	26.5	26.3	22.9	-3.4	-3.440	-2.754
	F	21.7	23.4	23.6	20.9	-2.7	-2.703	-1.997
Y_GE65	T	10.5	10.4	10.7	11.6	0.9	0.934	1.069
	M	13.7	8	10	8.8	-1.2	-1.128	-1.718
	F	9.2	10.5	10.8	12.3	1.5	1.519	2.105
Y_GE75	T	11.6	10.2	10.9	12.5	1.6	1.590	1.552
	M	11.6	7.9	9.9u	8.7	-1.2	-1.172	-1.091
	F	11.9	10.4	11.5	13.3	1.8	1.790	2.050
Y_LT18	T	17.9	20.5	20	21.8	1.8	1.862	2.382

liII - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[OV-9] At-risk-of-poverty rate anchored at a fixed moment in time (2005) (by age and gender)

age	sex	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	8.2	8	7.3	7.7	0.4	0.373	-0.180
	M	8.2	8	7.1	7	-0.1	-0.123	-0.782
	F	8.2	8.1	7.5	8.3	0.8	0.856	0.407
Y18-64	T	8.2	8.4	7.9	7.6	-0.3	-0.289	-0.586
	M	8.7	8.8	8.2	7.5	-0.7	-0.755	-1.072
	F	7.7	8.1	7.5	7.7	0.2	0.183	-0.096
Y_GE65	T	7.5	6.6	5	6.4	1.4	1.398	0.048
	M	5.4	3.8	2.5	3	0.5	0.498	-0.944
	F	9	8.7	7	9	2	2.043	0.790
Y_LT18	T	8.7	8	7.6	8.9	1.3	1.325	0.797

li22 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[OV-C11] At-risk-of-poverty rate before social transfers (by age and gender)

age	sex	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	42.2	40.5	41.6	42.4	0.8	0.772	0.931
	M	39.6	37.6	38.6	39.1	0.5	0.541	0.511
	F	44.7	43.3	44.5	45.5	1	0.984	1.329
Y18-64	T	31	28.7	29.5	30	0.5	0.527	0.280
	M	29	26.7	27.6	27.8	0.2	0.278	0.090
	F	33	30.7	31.4	32.2	0.8	0.778	0.476
Y_GE65	T	94.8	93.4	93	94.4	1.4	1.489	0.736
	M	93.2	90.9	89.8	92.1	2.3	2.231	0.752
	F	96	95.4	95.4	96.3	0.9	0.850	0.693
Y_LT18	T	34.8	30.9	32	32.5	0.5	0.465	-0.116

li09 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[OV-C11] At-risk-of-poverty rate before social transfers (by age and gender)

age	sex	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	42.2	40.5	41.6	42.4	0.8	0.772	0.931
	M	39.6	37.6	38.6	39.1	0.5	0.541	0.511
	F	44.7	43.3	44.5	45.5	1	0.984	1.329
Y18-64	T	31	28.7	29.5	30	0.5	0.527	0.280
	M	29	26.7	27.6	27.8	0.2	0.278	0.090
	F	33	30.7	31.4	32.2	0.8	0.778	0.476
Y_GE65	T	94.8	93.4	93	94.4	1.4	1.489	0.736
	M	93.2	90.9	89.8	92.1	2.3	2.231	0.752
	F	96	95.4	95.4	96.3	0.9	0.850	0.693
Y_LT18	T	34.8	30.9	32	32.5	0.5	0.465	-0.116

li09 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

[SI-C2] Inequality of income distribution Gini coefficient

indic_il	2008	2009	2010	2011	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
GINI	24	24.8	24.1	24.4	0.3	0.313	0.104

di12 - SE - Sverige - 12-09-07 - estat

Y - Y-1 [shown]: Difference between current and previous years calculated on shown values

[abs]: Difference between current and previous years calculated on values with all decimals

Y - AVG(Y-[1,2,3]): Difference between current and mean of previous 3 years (if available) calculated on values with all decimals

1.2 Other Indicators

Mean of equivalised disposable income

	Mean
By household size:	
1 household member	362 065
2 household members	425 518
3 household members	354 711
4 or more household members	295 499
By age groups:	
< 25	281 165
25 - 34	381 815
35 - 44	472 786
45 - 54	445 782
55 - 64	455 472
65 +	336 260
By sex:	
Male	407 462
Female	374 231
Total	390 277

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

2. Accuracy

2.1. Sampling design

2.1.1. Type of sampling

One stage sample, no stratification, no clustering.

2.1.2. Sampling units

Primary sampling unit is an individual in the register of the total population (TPR).

2.1.3. Stratification and sub-stratification criteria

No stratification was applied in the sampling procedure.

2.1.4. Sample size and allocation criteria

	Total	Total %
Questionnaire completed	6 717	63 %
Unable to participate	335	3 %
Not found	1 364	13 %
Refusal	2 173	20 %
Over-coverage	110	1%
Total	10 699	100%

2.1.5. Sample selections schemes

Each sub-sample was drawn with systematic sampling from the sampling frame (register of total population). The frames were always ordered by personal identification number consisting of digits YYYYMMDD-XXXX where YYYY is year of birth, MM is month of birth, DD is day of birth and XXXX are numbers that makes the personal identification number unique.

2.1.6. Sample distribution over time

The sample was evenly distributed during February 2011 and December 2011. Interviews were conducted between 2011-02-01 – 2011-12-31.

2.1.7. Renewal of sample: Rotational groups

Panel/ Rotational group	2008	2009	2010	2011
7 (DB175=2)	New 17+	17 and immi- grants	17 and immi- grants	17 and immi- grants
8 (DB175=3)		New 16+	Immigrants	Immigrants
1 (DB175=4)			New 16+	Immigrants
2 (DB175=1)				New 16+

Panel 7 (DB175=2):

In 2008 a systematic sample was drawn from the register of total population (TPR), age 17 and older. In 2009, this panel was complemented with 17-year-olds and persons of age 17 and older who had immigrated since the previous sample was drawn. The exact same procedure was repeated in 2010 and 2011.

Panel 8 (DB175=3):

In 2009 a systematic sample was drawn from the register of total population (TPR), age 16 and older but the 16-year-olds did not participate in the survey until next year. In 2010, this panel was complemented with persons who had immigrated since the previous sample was drawn. In 2011, this panel was complemented with persons who had immigrated since the previous sample was drawn.

Panel 1 (DB175=4):

In 2010 a systematic sample was drawn from the register of total population (TPR), age 16 and older but the 16-year-olds did not participate in the survey until next year. In 2011, this panel was complemented with persons who had immigrated since the previous sample was drawn.

Panel 2 (DB175=1):

In 2011 a systematic sample was drawn from the register of total population (TPR), age 16 and older but the 16-year-olds did not participate in the survey.

2.1.8. Weightings

2.1.8.1. Design factor

Due to varying inclusion probabilities for the sub-samples we have approximated these by means of poststratification. Poststrata, N_h , refers to a combination of eight age groups and sex.

Table 2.8.1: Poststrata, N_h

Age	Men	Women
17-24	1	9
25-34	2	10
35-44	3	11
45-54	4	12
55-64	5	13
65-74	6	14
75-84	7	15
84-	8	16

All members in the sampled individuals household belong to the same poststratum.

Within each poststratum the design weights, π_k , of the sampled individuals are computed as the inverse of the approximated probability of inclusion

$$\pi_k = N_h / n_h$$

2.1.8.2. Non-response adjustment

The non-response adjustment are done by straight expansion within each poststratum, see section 2.1.8.3 and 2.1.8.4.

2.1.8.3. Adjustments to external data

Since we from the sampling frame know the total number of individuals in each poststratum, the estimated number of individuals within each poststratum will coincide with known population totals.

2.1.8.4. Final cross-sectional weight

The final weights are constructed in the following way:

$$w_k = \frac{N_h}{n_h} * \frac{n_h}{m_h} = \frac{N_h}{m_h}$$

Where w_k = final cross-sectional weight for individual k

N_h = total number of individuals in poststratum h

n_h = number of individuals in the sample in poststratum h

m_h = number of responding individuals in poststratum h

2.1.9. Substitutions

Substitution have not been applied.

2.1.9.1. Method of selection of substitutes

- n.a

2.1.9.2. Main characteristics of substituted units compared to original units, by region (if available)

- n.a

2.2. Sampling errors

2.2.1 Sampling errors and effective sample size

Since variables used to construct the common cross-sectional EU indicators are taken from administrative registers, the effective sample size is the same as the achieved sample size.

The following tables show mean, number of observations and standard error for at-risk-of-poverty rate (by age and gender) and equivalised disposable income, based on the cross-sectional component of EU-SILC.

At-risk-of-poverty-rate (by age and gender)

	Mean	Number of observations	Standard error
Total	14,0	16 665	0,27
Male	12,2	8 336	0,36
Female	15,7	8 329	0,40
18-64 years	12,5	10 052	0,33
Male	12,0	4 986	0,46
Female	13,0	5 066	0,47
65+ years	18,2	2 754	0,74
Male	9,8	1 365	0,81
Female	24,7	1 389	1,16
0-17 years	14,5	3 859	0,57

Equivalised disposable income

	Mean	Number of observations	Standard error
By household size:			
1 household member	362 065	1 649	4 830
2 household members	425 518	3 897	3 796
3 household members	354 711	772	4 926
4 or more household members	295 499	399	6 413
By age groups:			
< 25	281 165	823	5 010
25 - 34	381 815	792	5 354
35 - 44	472 786	1 085	6 582
45 - 54	445 782	1 088	6 285
55 - 64	455 472	1 111	5 665
65 +	336 260	1 818	5 783
By sex:			
Male	407 462	3 201	4 374
Female	374 231	3 516	3 008
Total	390 277	6 717	2 625

2.3. Non-sampling errors

2.3.1. Sampling frame and coverage errors

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). 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.

A major means of identifying any person is the personal identity number that is assigned to every individual registered in TPR. 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 twelve digits. The first eight 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.

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.

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 individuals 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. People residing in Sweden without having residence permit (irregu-

lar migrants) or while waiting for residence permit are not included in the population.

2.3.2. Measurement and processing errors

2.3.2.1. Measurement errors

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.

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.

Following a basic introductory course in survey methods, new interviewers participate in an additional one-day course that includes approximately six hours of intensive training (survey of living conditions including EU-SILC). The various sections of the interview protocol are thoroughly reviewed and practice in handling certain complicated questions is provided.

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

CATI was the main method used in SILC. The interview form has been specially designed for this type of survey but programming it is always a complicated matter.

Indirect interviews can be a source of errors. Applied on appropriate questions experience says that indirect interviews can be an efficient method to collect information.

2.3.2.2. Processing errors

Data are checked interactively (values, syntax, logics) as an integrated part of the data entry process followed by the Eurostat control program (after transformation to EU-SILC file format).

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

The number of households for which an interview is accepted (DB135=1).

DB075 (Year of original sample)	2 (2008)	3 (2009)	4 (2010)	1 (2011)	Total
Interview accepted	1 663	1 695	1 786	1 573	6 717
Interview not accepted	838	859	1028	1 257	3 982
Total	2 501	2 554	2 814	2 830	10 699

Number of persons who are members of the households for which the interview is accepted for the database (DB135 = 1), and who completed a personal interview.

DB075 (Year of original sample)	2 (2008)	3 (2009)	4 (2010)	1 (2011)	Total
	3 348	3 444	3 636	3 239	13 667

Number of selected respondents who are members of the households for which the interview is accepted for the database (DB135 = 1), and who completed a personal interview.

DB075 (Year of original sample)	2 (2008)	3 (2009)	4 (2010)	1 (2011)	Total
	1 663	1 695	1 786	1 573	6 717

2.3.3.2. Unit non-response

Household non-response rate:

$$Ra = \text{Address contact rate} = 9335 / (10699 - 110) = 88.16\%$$

$$Rh = \text{Proportion of complete household interviews accepted for the database} = 6717 / 9335 = 72.0 \%$$

$$NRh = \text{Household non-response rate} = (1 - (Ra * Rh)) * 100 = 36.5 \%$$

Individual non-response rates (NRp):

Rp = Proportion of complete interviews within the households accepted for the database = 1

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

Overall individual non-response rates for the selected respondent:

$$1-(6717/10699)=37,2\%$$

2.3.3.3. Distribution of households (original units)

By Contact address (DB120)

	Frequency	Percent
Total (DB120=11 to 23)	10 699	100
Address contacted (DB120=11)	9 347	87,4
Address non-contacted (DB120=21 to 23)	1 352	12,6
Total address non-contacted	1 352	100,0
Address cannot be located	1 230	91,0
Address unable to access	12	0,9
Address does not exist	110	8,1

By Household questionnaire result (DB130)

	Frequency	Percent
Total	10 699	100
Household questionnaire completed (DB130=11)	6 717	62,8
Interview not completed (DB120=21 to 24 and missing)	3 982	37,2
Total interview not completed	3 982	100
Refusal to co-operate (DB130=21)	1 230	30,9
Entire household away (DB130=22)	12	0,3
Household unable to respond (DB130=23)	110	2,8
Other reasons	2 630	66,0

By Household interview acceptance (DB135)

	Frequency	Percent
Household questionnaire completed (DB135=1+2)	6 717	100
Interview accepted for the database (DB135=1)	6 717	100
Interview rejected (DB135=0)	0	0

2.3.3.4. Distribution of substituted units

-n.a.

2.3.3.5. Item non-response

All members in the responding persons household are known. Their personal income variables are collected from national registers. Household income variables are calculated from the personal income variables.

For non-respondents we do not know the household composition. Therefore it is not meaningful to collect any information from administrative registers.

Variable PI200G "Gross monthly earnings for employees" is not collected.

2.3.3.6. Total item non-response

Total item non-response = item non-response + unit non-response.

Since we do not have any item non-response on the variables that construct the common cross-sectional EU indicators and equivalised disposable income, the total item non-response equals the unit non-response, see section 2.3.3.2.

2.4. Mode of data collection

Every responding unit have RB250=13 which means data status="Information completed from both interview and registers"

Distribution of RB245 (respondent status) by RB250 (data status)

	RB250=13
RB245=2 (selected respondent)	6 717
RB245=3 (not selected respondent)	6 718
Total (RB245 1 to 3)	13 435

Distribution of RB245 (respondent status) by RB260 (type of interview)

	RB260=1 Face to Face	RB260=3 CATI	RB260=5 Proxy
RB245=2 (selected respondent)	7 0,1	6 561 97,7	149 2,2
RB245=3 (not selected respondent)	2 0,0	6 525 97,1	191 2,8
Total (RB245 1 to 3)	9 0,1	13086 97,4	340 2,5

2.5. Interview duration

The first time the respondent participated in the survey, the interview duration was approximately 40 minutes. Following years, fewer questions are asked and interview duration drops to roughly 15 minutes.

	DB075=11 (2011)	DB075=4 (2010)	DB075=3 (2009)	DB075=2 (2008)
Interview duration in minutes (PB120)	39	16	16	16

3. Comparability

3.1. Basic concepts and definitions

The reference population:

The reference population is the whole Swedish population except short-term migrants. People who stay in Sweden for no longer than 3-12 months are not covered.

Private household definition:

The regulation definition of Eurostat SILC is applied.

The household membership:

The regulation definition is applied

The income reference period used:

Year N-1

The period for taxes on income and social insurance contributions:

Year N-1

The reference period for taxes on wealth:

n.a.

The lag between the income reference period and current variables:

One year.

The total duration of the data collection of the sample:

The data was collected from February to December.

Basic information on activity status during the income reference period:

The twelve calendar months proceeding the month of the interview.

3.2. Components of income

3.2.1. Differences between national and 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 calculated by using variables HH010, HH020, HH030 and a variable based on regional classifications. The dwelling costs were imputed based on data from the national household budget survey and the national housing survey.

3.2.2. Source used for collection of income variables

The income variables as well as wealth and taxes are collected by administrative databases and registers at The Swedish Tax Agency and Statistics Sweden.

3.2.3. Form of income variables at component level

Gross but exclusive of employers' social contributions

3.2.4. The method used for obtaining income target variables

The components were gross and available from administrative registers with 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 sources of income components are registers at The Swedish Tax Agency and Statistics Sweden.