Intermediate Quality Report Swedish 2010 EU-SILC

The 2010 cross-sectional component

Statistics Sweden 2011-12-22

Table of contents

1. Common cross-sectional European Union indicators

1.1 Common cross-sectional EU indicators

The next ten pages will provide the following tables according to Eurostats indicator programs:

Table 1: At-risk-of- poverty rate after social transfers by age and gender

Table 2: At-risk-of- poverty rate after social transfers by most frequent activity status and gender

Table 3: At-risk-of- poverty rate after social transfers by household type

Table 4: At-risk-of- poverty rate after social transfers by accomodation tenure status

Table 5: At-risk-of-poverty threshold (illustrative values)

Table 6: Inequality of income distribution S80/S20 income quintile share ratio

Table 7: Relative median at-risk-of-poverty gap

Table 8: At-risk-of-poverty rate anchored at a moment in time

Table 9: At-risk-of-poverty rate before social transfers except old-age and survivors' benefits'

Table 10: At-risk-of-poverty rate before transfers including old-age and survivors' benefits'

Table 11: Inequality of income distribution: Gini coefficient

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

age	sex	unit	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	1000PERS	958.9	1121.2	1215.1	**1212.1**	-3	-3.036	113.650
		PC_POP	10.5	12.2	13.3	**12.9**	-0.4	-0.421	0.848
	M	1000PERS	469.3	514.6	547.6	**530.8**	-16.8	-16.716	20.382
		PC_POP	10.5	11.3	12	**11.4**	-0.6	-0.676	0.075
	F	1000PERS	489.7	606.6	667.5	**681.2**	13.7	13.680	93.269
		PC_POP	10.6	13	14.5	**14.3**	-0.2	-0.178	1.605
Y18-64	T	1000PERS	551.8	621.3	674	**671.3**	-2.7	-2.745	55.572
		PC_POP	10.2	11.2	12.1	**11.9**	-0.2	-0.118	0.815
	M	1000PERS	295.9	316.8	337.3	**334.5**	-2.8	-2.735	17.883
		PC_POP	10.8	11.4	12	**11.8**	-0.2	-0.175	0.432
	F	1000PERS	255.9	304.5	336.7	**336.7**	0	.	37.689
		PC_POP	9.5	11	12.1	**12.1**	0	.	1.202
Y_GE65	T	1000PERS	149.1	222.5	283.9	**265.8**	-18.1	-18.122	47.263
		PC_POP	9.9	15	17.7	**15.5**	-2.2	-2.257	1.306
	M	1000PERS	40.2	56.7	73.2	**59**	-14.2	-14.202	2.325
		PC_POP	6.1	8.8	10.4	**7.8**	-2.6	-2.588	-0.663
	F	1000PERS	108.9	165.9	210.7	**206.7**	-4	-3.920	44.937
		PC_POP	12.7	19.7	23.6	**21.6**	-2	-1.973	2.983
Y_LT18	T	1000PERS	258.1	277.4	257.2	**275**	17.8	17.831	10.816
		PC_POP	12	12.9	13.1	**13.1**	0	.	0.451

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

wstatus	sex	age	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
EMP (Employment)	T	Y_GE18	6.4	6.8	6.9	6.5	-0.4	-0.460	-0.244
	M	Y_GE18	7	7.2	7.2	6.3	-0.9	-0.865	-0.795
	F	Y_GE18	5.8	6.3	6.6	6.6	0	.	0.358
NEMP (Non employment)	T	Y_GE18	15.2	20	23.6	22	-1.6	-1.621	2.403
	M	Y_GE18	14.2	17.6	20.4	18.9	-1.5	-1.506	1.483
	F	Y_GE18	15.9	21.8	26.1	24.4	-1.7	-1.720	3.132
UNE (Unemployment)	T	Y_GE18	25.5	39.2	39	36.3	-2.7	-2.779	1.670
	M	Y_GE18	32.4	41.6	42.1	40.6	-1.5	-1.409	1.985
	F	Y_GE18	18.6	36.7	34.8	30.8	-4	-3.917	0.801
RET (Retired)	T	Y_GE18	9.5	14.9	17.6	15.6	-2	-2.050	1.534
	M	Y_GE18	6.9	10.1	10.4	8.2	-2.2	-2.116	-0.864
	F	Y_GE18	11.5	18.5	23.2	21.2	-2	-1.985	3.471
INAC_OTH (Inactive population - Other)	T	Y_GE18	32.1	32.1	33.4	31.7	-1.7	-1.665	-0.780
	M	Y_GE18	35.3	35.7	37.2	35.1	-2.1	-2.128	-0.952
	F	Y_GE18	29.9	29.5	30.9	29.5	-1.4	-1.450	-0.656
NSAL	T	Y_GE18	.	.	18.1	14	-4.1	-4.087	-4.087
	M	Y_GE18	.	.	18	13.7	-4.3	-4.302	-4.302
	F	Y_GE18	.	.	18.4	14.9	-3.5	-3.559	-3.559
SAL	T	Y_GE18	.	.	5.8	5.8	0	.	-0.035
	M	Y_GE18	.	.	5.7	5.4	-0.3	-0.282	-0.282
	F	Y_GE18	.	.	6	6.2	0.2	0.220	0.220

li04 - SE - Sverige - 11-10-05 - 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	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	10.5	12.2	13.3	12.9	-0.4	-0.440	0.862
HH_NDCH (Households without dependent children)	10.9	13.2	15.2	14.4	-0.8	-0.850	1.250
A1_LT65 (One adult younger than 65 years)	22	24	26.7	26.7	0	.	2.499
A1_GE65 (One adult 65 years or older)	17.1	26.8	33.1	31.3	-1.8	-1.863	5.602
A1F (Single female)	19.1	27.4	33.1	32.9	-0.2	-0.269	6.341
A1M (Single male)	21.3	22.3	24.4	23.4	-1	-1.056	0.703
A2_2LT65 (Two adults younger than 65 years)	6.2	7.3	6.6	7.1	0.5	0.461	0.348
A2_GE1_GE65 (Two adults, at least one aged 65 years and over)	4.2	6.1	5.9	4.9	-1	-0.938	-0.445
A_GE3 (Three or more adults)	5.1	4.5	4.5	5.5	1	1.057	0.856
HH_DCH (Households with dependent children)	10.1	11.2	11.2	11.3	0.1	0.097	0.469
A1_DCH (Single parent with dependent children)	25	26.8	28.9	33.1	4.2	4.156	6.176
A2_1DCH (Two adults with one dependent child)	5.8	8.9	7.1	6	-1.1	-1.058	-1.228
A2_2DCH (Two adults with two dependent children)	5.6	5.5	5.1	6.9	1.8	1.821	1.539
A2_GE3DCH (Two adults with three or more dependent children)	13.6	13.3	14.5	12.3	-2.2	-2.138	-1.459
A2	5.4	6.9	6.3	6.1	-0.2	-0.183	-0.075
A_GE2_DCH	7.8	8.9	8.4	8.2	-0.2	-0.171	-0.149
A_GE2_NDCH	5.4	6.6	6.2	6.1	-0.1	-0.096	0.001
A_GE3_DCH (Three or more adults with dependent children)	9.3	12.5	12.8	10.7	-2.1	-2.115	-0.838

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

age	sex	tenstatu	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	OWNER	6	7	8.4	**7.2**	-1.2	-1.260	0.034
		RENT	20.6	23.4	24.2	**26.4**	2.2	2.170	3.629
	M	OWNER	5.9	6.2	7.5	**5.9**	-1.6	-1.578	-0.591
		RENT	21.4	23.2	22.8	**25.4**	2.6	2.557	2.894
	F	OWNER	6	7.9	9.4	**8.4**	-1	-0.923	0.683
		RENT	20	23.5	25.5	**27.3**	1.8	1.748	4.259
Y18-64	T	OWNER	4.8	5.3	7	**5.5**	-1.5	-1.445	-0.127
		RENT	21.2	22.9	22.5	**25.7**	**3.2**	3.233	3.544
	M	OWNER	5.3	5.2	7.1	**5.6**	-1.5	-1.477	-0.285
		RENT	22	23.4	21.9	**25.4**	**3.5**	3.491	2.942
	F	OWNER	4.2	5.3	6.9	**5.5**	-1.4	-1.414	0.029
		RENT	20.4	22.3	23.2	**26.1**	2.9	2.942	4.152
Y_GE60	T	OWNER	7.5	10	11	**10.6**	-0.4	-0.362	1.105
		RENT	9.5	16.8	22.5	**19**	**-3.5**	-3.496	2.717
	M	OWNER	5.3	5.7	6.6	**5.8**	-0.8	-0.842	-0.137
		RENT	8.2	11.3	16.7	**13.7**	-3	-2.994	1.625
	F	OWNER	9.6	14	15.1	**15.1**	0	.	2.211
		RENT	10.3	20.2	26.2	**22.2**	**-4**	-4.019	3.285
Y_GE65	T	OWNER	9.4	13.2	13.7	**13**	-0.7	-0.750	0.842
		RENT	10	18.5	25.9	**20.8**	**-5.1**	-5.032	2.728
	M	OWNER	5.5	7.5	7.1	**5.8**	-1.3	-1.315	-0.885
		RENT	8	12.4	19.7	**13.6**	**-6.1**	-6.159	0.195
	F	OWNER	13.1	18.3	19.8	**19.5**	-0.3	-0.296	2.453
		RENT	11	21.8	29.4	**24.9**	**-4.5**	-4.473	4.170
Y_GE75	T	OWNER	16.9	22.5	22.8	**22.5**	-0.3	-0.284	1.766
		RENT	12.2	21.3	32.1	**24.6**	**-7.5**	-7.421	2.789
	M	OWNER	8.9	11.4	11.6	**10.7**	-0.9	-0.870	0.095
		RENT	7.5	13.6	24	**11.2**	**-12.8**	-12.796	-3.877
	F	OWNER	23.4	30.9	32.2	**31.8**	-0.4	-0.337	3.023
		RENT	14.2	25	36	**30.3**	**-5.7**	-5.752	5.193
Y_LT18	T	OWNER	6.5	7.2	8.2	**6.8**	-1.4	-1.469	-0.534
		RENT	28.3	29.2	29.1	**34.5**	**5.4**	5.350	5.626

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

hhtyp	currency	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
A1 (Single person)	**EUR**	11307	12344	12749	**11825**	-924	-923.23	-307.87
	NAC	104641	114183	122580	**125575**	2995	2994.49	11773.4
	PPS	9545	10680	11261	**10980**	-281	-280.62	485.21
A2_2CH_LT14 (Two adults with two children younger than 14 years)	**EUR**	23745	25922	26772	**24833**	-1939	-1938.8	-646.52
	NAC	219745	239784	257418	**263707**	**6289**	6288.43	24724.2
	PPS	20045	22427	23648	**23059**	-589	-589.30	1018.95

li01 - SE - Sverige - 11-10-05 - 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	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	S80_S20	3.3	3.5	3.7	3.5	-0.2	-0.143	0.025
Y_GE65	S80_S20	2.8	3.6	3.2	3.1	-0.1	-0.123	-0.077
Y_LT65	S80_S20	3.4	3.4	3.7	3.6	-0.1	-0.126	0.045

di11 - SE - Sverige - 11-10-05 - 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	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	**T**	20.3	18	20.3	**19.7**	-0.6	-0.554	0.187
	M	22.7	20.1	22.1	**22.9**	0.8	0.761	1.235
	F	18.3	17	17.8	**16.8**	-1	-0.993	-0.878
Y18-64	**T**	24.4	23.7	24.8	**25.5**	0.7	0.769	1.254
	M	26	24.1	26.5	**26.3**	-0.2	-0.200	0.790
	F	21.6	21.7	23.4	**23.6**	0.2	0.185	1.388
Y_GE65	**T**	10.9	10.5	10.4	**10.7**	0.3	0.241	0.045
	M	8.1	13.7	8	**10**	2	1.948	0.035
	F	12	9.2	10.5	**10.8**	0.3	0.213	0.165
Y_GE75	**T**	11.2	11.6	10.2	**10.9**	0.7	0.622	-0.152
	M	7.4u	11.6	7.9	**9.9u**	2	1.952	0.923
	F	12.6	11.9	10.4	**11.5**	1.1	1.126	-0.108
Y_LT18	**T**	17.5	17.9	20.5	**20**	-0.5	-0.513	1.352

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

age	sex	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	8.9	8.2	8	7.3	-0.7	-0.747	-1.100
	M	9.2	8.2	8	7.1	-0.9	-0.868	-1.369
	F	8.6	8.2	8.1	7.5	-0.6	-0.629	-0.839
Y18-64	T	8.9	8.2	8.4	7.9	-0.5	-0.572	-0.653
	M	9.9	8.7	8.8	8.2	-0.6	-0.546	-0.859
	F	8	7.7	8.1	7.5	-0.6	-0.600	-0.446
Y_GE65	T	7	7.5	6.6	5	-1.6	-1.583	-2.026
	M	4.4	5.4	3.8	2.5	-1.3	-1.361	-2.082
	F	9	9	8.7	7	-1.7	-1.752	-1.928
Y_LT18	T	10.2	8.7	8	7.6	-0.4	-0.457	-1.415

li22 - SE - Sverige - 11-10-05 - 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-C6] At-risk-of-poverty rate before social transfers, by gender and selected age groups (except pensions)

age	sex	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	27.5	28.5	26.6	**26.7**	0.1	0.081	-0.855
	M	25.8	26.6	24.4	**24.6**	0.2	0.162	-1.002
	F	29.2	30.3	28.7	**28.7**	0	.	-0.705
Y18-64	T	26.7	27.4	25.3	**25.9**	0.6	0.587	-0.582
	M	26.2	26.3	24.4	**25.2**	0.8	0.885	-0.374
	F	27.3	28.4	26.2	**26.5**	0.3	0.287	-0.789
Y_GE65	T	21	24.5	26.4	**23.3**	**-3.1**	-3.032	-0.632
	M	10.5	14.9	16.3	**13.5**	-2.8	-2.793	-0.392
	F	29	31.9	34.3	**31.1**	**-3.2**	-3.194	-0.597
Y_LT18	T	34	34.1	30.4	**31.5**	1.1	1.069	-1.356

li10 - SE - Sverige - 11-10-05 - 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	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
TOTAL	T	41.5	42.2	40.5	**41.6**	1.1	1.095	0.201
	M	38.9	39.6	37.6	**38.6**	1	0.933	-0.144
	F	43.9	44.7	43.3	**44.5**	1.2	1.237	0.551
Y18-64	T	29.8	31	28.7	**29.5**	0.8	0.772	-0.343
	M	28.1	29	26.7	**27.6**	0.9	0.853	-0.379
	F	31.4	33	30.7	**31.4**	0.7	0.692	-0.300
Y_GE65	T	92.6	94.8	93.4	**93**	-0.4	-0.461	-0.638
	M	90.3	93.2	90.9	**89.8**	-1.1	-1.087	-1.626
	F	94.4	96	95.4	**95.4**	0	.	0.192
Y_LT18	T	35	34.8	30.9	**32**	1.1	1.069	-1.585

li09 - SE - Sverige - 11-10-05 - 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	2007	2008	2009	2010	Y - Y-1 [shown]	[abs]	Y - AVG(Y-[1,2,3])
GINI	23.4	24	24.8	**24.1**	-0.7	-0.676	0.017

di12 - SE - Sverige - 11-10-05 - 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	350 963
2 household members	403 816
3 household members	350 965
4 or more household members	280 276
By age groups:	
< 25	259 624
25 - 34	381 398
35 - 44	459 178
45 - 54	435 487
55 - 64	430 394
65 +	316 044
By sex:	
Male	388 044
Female	362 064
Total	374 642

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 %
Questionnare completed	7 173	66 %
Unable to participate	343	3 %
Not found	1 290	12 %
Refusal	1 982	18 %
Over-coverage	96	1%
Total	10 884	

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 uniqe.

2.1.6. Sample distribution over time
The sample was evenly distributed during February 2010 and December 2010. Interviews were conducted between 2010-02-01—2010-12-31.

2.1.7. Renewal of sample: Rotational groups

Panel/ Rotational group	2007	2008	2009	2010
7 (DB175=2)	New 17+	17 and immigrants	17 and immigrants	17 and immigrants
8 (DB175=3)		New 16+	Immigrants	Immigrants
1 (DB175=4)			New 16+	Immigrants
2 (DB175=1)				New 16+

Panel 7 (DB175=2):

In 2007 a systematic sample was drawn from the register of total population (TPR), age 17 and older. In 2008 , 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 2009 and 2010.

Panel 8 (DB175=3):

In 2008 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 2009, this panel was complemented with persons who had immigrated since the previous sample was drawn. In 2010, this panel was complemented with persons who had immigrated since the previous sample was drawn. Unfortunately this panel was not complemented with 17-year-olds.

Panel 1 (DB175=4):

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.

Panel 2 (DB175=1):

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.

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	12.9	17 881	0.09
Male	11.4	8 988	0.11
Female	14.3	8 893	0.15
18-64 years	11.9	10 806	0.11
Male	11.8	5 379	0.15
Female	12.1	5 427	0.16
65+ years:	15.5	2 759	0.29
Male	7.8	1 371	0.20
Female	21.6	1 388	0.57
0-17 years:	17.8	4 316	0.26

Equivalised disposable income

	Mean	Number of observations	Standard error
By household size:			
1 household member	350 963	1 770	4 556
2 household members	403 816	4 159	3 527
3 household members	350 965	825	7 261
4 or more household members	280 276	419	4 794
By age groups:			
< 25	259 624	927	4 248
25 - 34	381 398	894	4 960
35 - 44	459 178	1 210	6 406
45 - 54	435 487	1 146	5 804
55 - 64	430 394	1 194	5 419
65 +	316 044	1 802	5 646
By sex:			
Male	388 044	3 453	4 142
Female	362 064	3 720	2 868
Total	374 642	7 173	2 494

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. 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 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 jours 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.

The telephone interview mode CATI was the main method use in SILC 2010. The interview form has been specially designed for this type of survey but programming it is always a complicated matter. Telephone interviews with computer aid CATI is now currently used as the main way to make interviews.

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 housholds for which an interview is accepted (DB135=1).

DB075 (Year of orignal sample)	2 (2007)	3 (2008)	4 (2009)	1 (2010)	Total
Interview accepted	2 001	1 704	1 726	1 742	7 173
Interview not accepted	904	839	878	1 090	3 711
Total	2 905	2 543	2 604	2 832	10 884

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 orignal sample)	2 (2007)	3 (2008)	4 (2009)	1 (2010)	Total
	3 958	3 423	3 497	3 443	14 321

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 orignal sample)	2 (2007)	3 (2008)	4 (2009)	1 (2010)	Total
	2 001	1 704	1 726	1 742	7 173

2.3.3.2. Unit non-response

Household non-response rate:

Ra = Address contact rate = 9554/(10884-96) = 88.56%

Rh = Proportion of complete household interviews accepted for the database = 7173/9554 =75,1 %

NRh = Household non-response rate = (1-(Ra*Rh))*100 = 33.5 %

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-(7173/10884)=34.1%

2.3.3.3. Distribution of households (original units)

By Contact address (DB120)

	Frequency	Percent
Total (DB120=11 to 23)	10 884	100
Address contacted (DB120=11)	9 554	87.8
Address non-contacted (DB120=21 to 23)	1 330	12.2
Total address non-contacted	1 330	100
Address cannot be located	1 234	92.8
Address unable to access	0	0
Address does not exist	96	7.2

By Household questionnaire result (DB130)

	Frequency	Percent
Total	10 884	100
Household questionnaire completed (DB130=11)	7 173	65.9
Interview not completed (DB120=21 to 24 and missing)	3 711	34.1
Total intervew not completed	3 711	100
Refusal to co-operate (DB130=21)	1 982	53.4
Entire household away (DB130=22)	49	1.3
Household unable to respond (DB130=23)	304	8.2
Other reasons	1 376	37.1

By Household intereiew acceptance (DB135)

	Frequency	Percent
Household questionnaire completed (DB135=1+2)	7 173	100
Interview accepted for the database (DB135=1)	7 173	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)	7 173
RB245=3 (not selected respondent)	7 148
Total (RB245 1 to 3)	14 321

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)	16	7 016	141
	0%	98%	2%
RB245=3 (not selected respondent)	10	6 985	153
	0%	98%	2%
Total (RB245 1 to 3)	**26**	**14 001**	**294**
	0.2%	97.8%	2.1%

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 (2010)	DB075=4 (2009)	DB075=3 (2008)	DB075=2 (2007)
Interview duration in minutes (PB120)	39	15	16	15

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 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-1

The lag between the income reference period and current variables:
One year.

The total duration of the data collection of the sample:
The data collection was 11 months, February-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 calculating by using variables HH010, HH020, HH030 and a variable based on regional classifications described, the dwelling costs was imputed from our national household budget survey and our 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.