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**Final Quality report for the Swedish EU-SILC**  
**The 2005 – 2006 -2007-2008 longitudinal component**

**Statistics Sweden December 2010-12-27**

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## 1. Common longitudinal European Union indicators based on the longitudinal component of EU-SILC

The Swedish EU-SILC panel survey 2005, 2006, 2007 and 2008 were carried out as an integrated part of the Swedish survey of living conditions (ULF). For the longitudinal EU-SILC survey 2005-2006-2007-2008 we made a separate sample starting 2004 with four panels to rotate according to the regulations. In year 2005 panel 5 was included for the first time, next year 2006 for the second time as well as panel 6 was included for the first time. Year 2007 panel 5 was included for the third time, panel 6 for the second time and panel 7 for the first time. Year 2008 the panel 8 was included for the first time.

The micro data registers transmitted to Eurostat contain all 2005-2006-2007-2008 longitudinal indicators stipulated in the regulation and comprises a panel of four years 2005 to 2008 a indicator which reveal social exclusion. See below the percent of population which at least has been two times in the longitudinal panel (2005-2008).

At-persistent-risk-of-poverty rate (by age and gender)		
Gender	Age	%
<b>Both</b>	<b>total</b>	8,6
	>18 years < 65 years	5,9
	> 65 years	16,8
<b>Male</b>	<b>total</b>	7,5
	>18 years < 65 years	6,4
	> 65 years	10,8
<b>Female</b>	<b>total</b>	9,6
	>18 years < 65 years	5,5
	> 65 years	21,8

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Average equivalised disposable income broken down by household size, age group and gender. Cross 2005, 2006, 2007 and 2008 in SKr.

Year of the survey	2005	2006	2007	2008
By household size				
1 household member	300 953	292 390	308 149	323 367
2 household members	327 800	329 576	351 994	369 221
3 household members	278 128	265 941	286 063	310 494
4 + household members	227 890	218 950	235 060	262 683
By age groups				
< 25	235 062	205 452	220 649	241 009
25 - 34	333 008	311 352	325 046	354 111
35 - 44	364 017	356 764	390 567	414 965
45 - 54	342 160	334 976	371 692	400 667
55 - 64	349 456	357 315	378 374	402 575
65 +	257 770	261 890	279 175	275 134
By sex				
Male	314 301	312 339	333 216	355 912
Female	305 159	297 957	320 052	331 875
Total	309 610	304 905	326 407	343 466

## 2. Accuracy

### 2.1 Sample design

#### 2.1.1. Type of sample design

The principal of our sampling is a stratified sample with approximately the same sample fraction within each stratum. As described above the total sample consists of four panels according to the rotating rules.

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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. Like in the ULF–survey the sample unit was individuals and all individuals (selected persons) who have been included in ULF at any time during the preceding seven years are eliminated from the sample. In 2006, 2007 and 2008 the ‘old’ panels were complemented with a sample among immigrants and individuals 16 years old who had ”grown into” the population since the sample was originally drawn.

### 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.

Sample unit is individuals in TRP aged 16 years and older and household members living in the same household. It is not possible to find all household members using TPR as a sampling frame. We can find persons who are married with the selected persons and who have children under 18 years together with the selected persons and children belonging to these households. Household members in other types of households can not be included in the sampling phase. For this reason it is only possible to detect the correct household consistence for the respondent individuals in the sample.

### 2.1.3 Stratification and sub-stratification criteria

No stratification was applied in the sampling procedure.

### 2.1.4 Sample size and allocation criteria (households=selected persons)

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

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### **2.1.5 Sample selections schemes.**

2004 we constructed a sampling frame from the register of total population (RTP). The sampling frame was on an individual level, but for each individual we have a notation of all members of his corresponding household (married couples according to the RTP). The frame was sorted in age order and the sample was drawn systematically.

The following year, 2005, we repeated the same procedure when sampling the new panel 5 as described in the next section. This time we excluded the individuals and the household-members who belonged to panel 1. We also complement the remaining panels, panel 2-4, with young people and immigrants who have “grown into the population”. Therefore we construct a special sampling frame with those individuals and make a systematic random sample.

2006 panel 2 was excluded and the new panel 6 was drawn in the same way as 2005. 2007 panel 3 was excluded and the new panel 7 was drawn in the same way.

### **2.1.6 Sample distribution over time**

The original sample for the SILC-panel was drawn in August 2004 and randomly distributed into four parts, panel 1 to panel 4. In August 2005 panel 5 was drawn and in August 2006 panel 6 was drawn. The data collection was carried out for the whole sample in the last quarter of 2004 respective 2005, 2006 and 2007.

### **2.1.7 Renewal of sample: Rotation groups**

The panel rotating system started 2004 when panel 1, 2, 3 and 4 were sampled. 2005 the sample in panel 2, 3 and 4 was included in the survey and a new Panel 5 was drawn. In the year 2006 a new panel 6 and panel 3, 4, 5 and 6 are included in the sample complemented with young people and immigrants included in the population since 2004, 2005. In 2007 a new panel 7 and panel 4, 5 and 6 are included in the sample complemented with young people and immigrants included in the population since 2004, 2005 and 2006.

### **2.1.8 Weightings – Design factor and non-response adjustment**

For the time being non-response adjustment is carried out by means of post-stratification separately within each panel. Post-stratification refers to sex, age 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84 and 84+ years of the sampled individuals. All members in the sampled individuals' household belong to the same post-stratum.

These categories generate 16 post strata. The Stratum 1- 8 contains men and stratum 9-16 women, complemented young individuals belong to stratum 17 and immigrants stratum 18 where the sizes of the strata are derived from TPR .

#### **2.1.8.1 Design factor**

Within each post-stratum the design-weights of the sampled individuals are computed as the inverse of the probability of inclusion.  $D\text{-weight\_ind.} = N/\text{Total}$ . For the 16+ -aged members of this individual the  $D\text{-weight\_ind.}$  is divided by the number of 16+ -aged individuals (=1 or 2).

#### **2.1.8.2 Non-response adjustment**

As a first step the population-size for each post-stratum is adjusted according to detected over-coverage.

$N_{\text{corr}} = N * (\text{total-overcov.}) / \text{total}$ . In next step the weights are computed as:

$S\text{-weight\_ind} = N_{\text{corr}} / \text{respondent}$ .

#### **2.1.8.3 Adjustments to external data**

From the register of total population (RTP) we compute the number of individuals and the number households according to married people within each stratum when the sample is drawn. We have no possibilities to calibrate with other external data.



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#### **2.1.8.4 Final longitudinal weight**

In the first wave data from four panels are included. As in the cross-sectional estimation, the weights within each panel are divided by four, as the total sum of weights shall sum up to the population total.

#### **2.1.8.5 Non-response adjustments**

In the estimates of the longitudinal study from 2004 to 2007 only the individuals (and there households-members) who are responding all four years are included. The longitudinal weights sum up to population size the starting year 2004 corrected for over-coverage detected in 2004.

Within each stratum the weights are calculated as the quota:

$$S\text{-weight}_{L\_ind} = (\text{corrected population size 2004}) / (\text{number of respondent households all three years})$$

#### **2.1.8.6 Adjustments to external data**

From the register of total population (RTP) we compute the number of individuals and the number households according to married people within each stratum when the sample is drawn. We have no possibilities to calibrate with other external data.

#### **2.1.8.7 Final Longitudinal weight**

Se section 2.1.8.5

#### **2.1.8.8 Final household cross-sectional weight**

The household-weights are computed as:

For the 16+ -aged members of the individual the D-weight\_ind is divided by the number of 16+ -aged individuals (=1 or 2).

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## **2.1.9 Substitutions**

Substitution has not been applied. The most important reason for this is that the Swedish laws do not allow us to make imputation. 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. In case of partial non response we leave the values as missing. For this reason it is not relevant to fulfil the two following sections.

### **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

### **2.1.9.3 Distribution of substituted units by record of contact at address (DB120), household questionnaire result (DB130) and household interview acceptance (DB135) of the original units**

- n.a

## **2.2 Sampling errors**

Information concerning effective sample sizes and standard errors for the common longitudinal EU indicators will be available in the following tables.

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Table 1 : Components of the income variables at household level 2005

Variable	N	Mean	Std Dev
TOTAL HOUSEHOLD GROSS INCOME	6133	426469,5	310994,7
HY020 TOTAL DISPOSABLE HOUSEHOLD INCOME	6133	290639,9	182904,6
HY022 TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS OTHER THAN OLDAGE AND SURVIVOR'S BENEFITS	6133	243967,3	188367,4
HY023 TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS INCLUDING OLDAGE AND SURVIVOR'S BENEFITS	6133	204411,4	203398,8
HY040G INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS	6133	389,3	3993,3
HY040N INCOME FROM RENTAL OF A PROPERTY OR LAND NET	6133	272,5	2795,3
HY050G FAMILY/CHILDREN RELATED ALLOWANCES GROSS	6133	12995,7	28125,0
HY050N FAMILY/CHILDREN RELATED ALLOWANCES NET	6133	11642,9	23502,4
HY060G SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS	6133	1578,3	13109,6
HY060N SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET	6133	1578,3	13109,6
HY070G HOUSING ALLOWANCES GROSS	6133	2146,8	7831,1
HY070N HOUSING ALLOWANCES NET	6133	2146,8	7831,1
HY080G REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS	6133	496,2	3732,6
HY080N REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET	6133	496,2	3732,6
HY090G INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS GROSS	6133	10310,6	103921,4
HY090N INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS NET	6133	7219,3	72744,9
HY100G INTEREST REPAYMENTS ON MORTGAGE GROSS	6133	10301,2	17677,0
HY100N INTEREST REPAYMENTS ON MORTGAGE NET	6133	7210,9	12373,9
HY110G INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS	6133	361,1	4418,6
HY110N INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET	6133	295,6	3645,1
HY120G REGULAR TAXES ON WEALTH GROSS	6133	7561,7	15590,5
HY120N REGULAR TAXES ON WEALTH NET	6133	7561,7	15590,5
HY130G REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS	6133	624,5	3928,8
HY130N REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET	6133	624,5	3928,8
HY140G TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS	6133	127620,3	127488,9
HY140N TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET	6133	127620,3	127488,9

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Table 2: Components of the income variables at household level 2006

	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>
TOTAL HOUSEHOLD GROSS INCOME	6803	435983,6	295326,2
TOTAL DISPOSABLE HOUSEHOLD INCOME	6803	21,0	0,9
TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS OTHER THAN OLDAGE AND SURVIVOR'S BENEFITS	6803	298986,8	171772,2
TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS INCLUDING OLDAGE AND SURVIVOR'S BENEFITS	6803	11,0	0,4
INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS	6803	300,9	3170,8
INCOME FROM RENTAL OF A PROPERTY OR LAND NET	6803	210,6	2219,6
FAMILY/CHILDREN RELATED ALLOWANCES GROSS	6803	12038,8	27229,9
FAMILY/CHILDREN RELATED ALLOWANCES NET	6803	10687,7	22544,0
SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS	6803	1303,4	11016,5
SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET	6803	1303,4	11016,5
HOUSING ALLOWANCES GROSS	6803	1845,0	7363,6
HOUSING ALLOWANCES NET	6803	1845,0	7363,6
REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS	6803	940,7	4896,6
REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET	6803	940,7	4896,6
INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS GROSS	6803	9957,0	75402,6
INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS NET	6803	6971,7	52781,6
INTEREST REPAYMENTS ON MORTGAGE GROSS	6803	5703,5	10300,2
INTEREST REPAYMENTS ON MORTGAGE NET	6803	3992,5	7210,2
INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS	6803	336,3	4261,9
INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET	6803	272,6	3559,9
REGULAR TAXES ON WEALTH GROSS	6803	8346,9	24805,7
REGULAR TAXES ON WEALTH NET	6803	8346,9	24805,7
REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS	6803	292,1	2396,2
REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET	6803	292,1	2396,2
TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS	6803	128309,5	21803,0
TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET	6803	128309,5	21803,0

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Table 3 : Components of the income variables at household level 2007

<b>TOTAL HOUSEHOLD GROSS INCOME</b>	395 632	7 183	3 610
<b>TOTAL DISPOSABLE HOUSEHOLD INCOME</b>	274 446	7 183	2 119
<b>TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL</b>	234 603	7 183	2 155
<b>TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL</b>	185 961	7 183	2 348
<b>INCOME FROM RENTAL OF A PROPERTY OR LAND NET</b>	214	7 183	39
<b>FAMILY/CHILDREN RELATED ALLOWANCES NET</b>	9 030	7 183	270
<b>SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET</b>	1 300	7 183	123
<b>HOUSING ALLOWANCES NET</b>	2 587	7 183	104
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET</b>	802	7 183	53
<b>INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN</b>	8 629	7 183	929
<b>INTEREST REPAYMENTS ON MORTGAGE NET</b>	3 564	7 183	81
<b>INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET</b>	304	7 183	45
<b>REGULAR TAXES ON WEALTH NET</b>	7 131	7 183	349
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET</b>	268	7 183	27
<b>TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET</b>	113 715	7 183	1 425
<b>INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS</b>	306	7 183	55
<b>FAMILY/CHILDREN RELATED ALLOWANCES GROSS</b>	10 243	7 183	326
<b>SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS</b>	1 300	7 183	123
<b>HOUSING ALLOWANCES GROSS</b>	2 587	7 183	104
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS</b>	802	7 183	53
<b>INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN</b>	12 325	7 183	1 327
<b>INTEREST REPAYMENTS ON MORTGAGE GROSS</b>	5 091	7 183	115
<b>INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS</b>	373	7 183	53
<b>REGULAR TAXES ON WEALTH GROSS</b>	7 131	7 183	349
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS</b>	268	7 183	27
<b>TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS</b>	113 715	7 183	1 425


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Table 4 : Components of the income variables at household level 2008

<b>TOTAL HOUSEHOLD GROSS INCOME</b>	412 482	7 452	3 813
<b>TOTAL DISPOSABLE HOUSEHOLD INCOME</b>	293 825	7 452	2 443
<b>TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL</b>	248 299	7 452	2 496
<b>TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL</b>	183 261	7 452	2 863
<b>INCOME FROM RENTAL OF A PROPERTY OR LAND NET</b>	182	7 452	33
<b>FAMILY/CHILDREN RELATED ALLOWANCES NET</b>	9 425	7 452	278
<b>SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET</b>	1 349	7 452	125
<b>HOUSING ALLOWANCES NET</b>	2 521	7 452	101
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET</b>	789	7 452	51
<b>INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN</b>	10 982	7 452	932
<b>INTEREST REPAYMENTS ON MORTGAGE NET</b>	6 751	7 452	145
<b>INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET</b>	310	7 452	44
<b>REGULAR TAXES ON WEALTH NET</b>	5 937	7 452	177
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET</b>	230	7 452	24
<b>TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET</b>	112 490	7 452	1 442
<b>INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS</b>	260	7 452	48
<b>FAMILY/CHILDREN RELATED ALLOWANCES GROSS</b>	10 632	7 452	333
<b>SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS</b>	1 349	7 452	125
<b>HOUSING ALLOWANCES GROSS</b>	2 521	7 452	101
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS</b>	789	7 452	51
<b>INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN</b>	15 687	7 452	1 331
<b>INTEREST REPAYMENTS ON MORTGAGE GROSS</b>	9 644	7 452	207
<b>INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS</b>	385	7 452	54
<b>REGULAR TAXES ON WEALTH GROSS</b>	5 937	7 452	177
<b>REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS</b>	230	7 452	24
<b>TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS</b>	112 490	7 452	1 442


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Table 5 : Components of the income variables at personal level 2005

		<b>N</b>	<b>Mean</b>	<b>Std Dev</b>
 Variable				
<b>PY010G</b>	<b>EMPLOYEE CASH OR NEAR CASH INCOME GROSS</b>	12191	143927,8	174097,6
<b>PY010N</b>	<b>EMPLOYEE CASH OR NEAR CASH INCOME NET</b>	12191	97531,8	106283,3
<b>PY020G</b>	<b>NON-CASH EMPLOYEE INCOME GROSS</b>	12191	2120,3	15348,0
<b>PY020N</b>	<b>NON-CASH EMPLOYEE INCOME NET</b>	12191	1305,4	8386,1
<b>PY035G</b>	<b>CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS</b>	12191	2154,1	7130,8
<b>PY035N</b>	<b>CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET</b>	12191	2154,1	7130,8
<b>PY050G</b>	<b>CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS</b>	12191	5981,6	57739,8
<b>PY050N</b>	<b>CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET</b>	12191	3948,3	37132,2
<b>PY080G</b>	<b>PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS</b>	12191	1938,6	12642,3
<b>PY080N</b>	<b>PENSION FROM INDIVIDUAL PRIVATE PLANS NET</b>	12191	1330,9	8307,3
<b>PY090G</b>	<b>UNEMPLOYMENT BENEFITS GROSS</b>	12191	5095,9	22042,5
<b>PY090N</b>	<b>UNEMPLOYMENT BENEFITS NET</b>	12191	3732,0	16078,4
<b>PY100G</b>	<b>OLD-AGE BENEFITS GROSS</b>	12191	27368,6	69136,8
<b>PY100N</b>	<b>OLD-AGE BENEFITS NET</b>	12191	19545,6	46921,0
<b>PY110G</b>	<b>SURVIVOR' BENEFITS GROSS</b>	12191	483,9	5963,3
<b>PY110N</b>	<b>SURVIVOR' BENEFITS NET</b>	12191	354,0	4227,8
<b>PY120G</b>	<b>SICKNESS BENEFITS GROSS</b>	12191	5720,6	24567,8
<b>PY120N</b>	<b>SICKNESS BENEFITS NET</b>	12191	4092,3	17531,3
<b>PY130G</b>	<b>DISABILITY BENEFITS GROSS</b>	12191	6495,4	27879,6
<b>PY130N</b>	<b>DISABILITY BENEFITS NET</b>	12191	4810,0	20493,0
<b>PY140G</b>	<b>EDUCATION-RELATED ALLOWANCES GROSS</b>	12191	3126,5	11927,9
<b>PY140N</b>	<b>EDUCATION-RELATED ALLOWANCES NET</b>	12191	3114,3	11806,9

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Table 6 : Components of the income variables at personal level 2006

		<b>N</b>	<b>Mean</b>	<b>Std Dev</b>
 <b>PY010G</b>	EMPLOYEE CASH OR NEAR CASH INCOME GROSS	13591	148262,7	172225,0
<b>PY010N</b>	EMPLOYEE CASH OR NEAR CASH INCOME NET	13591	101553,2	106852,9
<b>PY020G</b>	NON-CASH EMPLOYEE INCOME GROSS	13591	1971,9	10245,6
<b>PY020N</b>	NON-CASH EMPLOYEE INCOME NET	13591	1255,0	6301,2
<b>PY035G</b>	CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS	13591	2086,3	5246,7
<b>PY035N</b>	CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET	13591	2086,3	5246,7
<b>PY050G</b>	CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS	13591	6891,6	61356,8
<b>PY050N</b>	CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET	13591	4623,5	40249,2
<b>PY080G</b>	PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS	13591	2383,1	15243,6
<b>PY080N</b>	PENSION FROM INDIVIDUAL PRIVATE PLANS NET	13591	1636,1	9886,4
<b>PY090G</b>	UNEMPLOYMENT BENEFITS GROSS	13591	5228,4	21868,8
<b>PY090N</b>	UNEMPLOYMENT BENEFITS NET	13591	3871,8	16131,4
<b>PY100G</b>	OLD-AGE BENEFITS GROSS	13591	27018,3	68309,1
<b>PY100N</b>	OLD-AGE BENEFITS NET	13591	19361,5	47209,6
<b>PY110G</b>	SURVIVOR' BENEFITS GROSS	13591	464,4	5715,2
<b>PY110N</b>	SURVIVOR' BENEFITS NET	13591	343,6	4099,3
<b>PY120G</b>	SICKNESS BENEFITS GROSS	13591	5168,8	22944,4
<b>PY120N</b>	SICKNESS BENEFITS NET	13591	3723,1	16442,5
<b>PY130G</b>	DISABILITY BENEFITS GROSS	13591	6660,4	28151,4
<b>PY130N</b>	DISABILITY BENEFITS NET	13591	4940,3	20706,3
<b>PY140G</b>	EDUCATION-RELATED ALLOWANCES GROSS	13591	3190,1	12095,0
<b>PY140N</b>	EDUCATION-RELATED ALLOWANCES NET	13591	3182,6	12005,1



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Table 7: Components of the income variables at personal level 2007

<b>Components of the income variables at personal level</b>			
	number	mean	standard error
<b>EMPLOYEE CASH OR NEAR CASH INCOME NET</b>	14204	103565	925
<b>NON-CASH EMPLOYEE INCOME NET</b>	14204	1298	133
<b>CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET</b>	14204	2057	49
<b>CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET</b>	14204	4406	283
<b>VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION NET</b>	14204	0	0
<b>PENSION FROM INDIVIDUAL PRIVATE PLANS NET</b>	14204	1945	87
<b>UNEMPLOYMENT BENEFITS NET</b>	14204	3770	133
<b>OLD-AGE BENEFITS NET</b>	14204	26551	445
<b>SURVIVOR' BENEFITS NET</b>	14204	483	43
<b>SICKNESS BENEFITS NET</b>	14204	3611	135
<b>DISABILITY BENEFITS NET</b>	14204	5536	186
<b>EDUCATION-RELATED ALLOWANCES NET</b>	14204	3125	102
<b>EMPLOYEE CASH OR NEAR CASH INCOME GROSS</b>	14204	149726	1479
<b>NON-CASH EMPLOYEE INCOME GROSS</b>	14204	2123	273
<b>CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS</b>	14204	2057	49
<b>CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS</b>	14204	6465	437
<b>VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION GROSS</b>	14204	0	0
<b>PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS</b>	14204	2817	132
<b>UNEMPLOYMENT BENEFITS GROSS</b>	14204	5044	178
<b>OLD-AGE BENEFITS GROSS</b>	14204	36692	636
<b>SURVIVOR' BENEFITS GROSS</b>	14204	670	60
<b>SICKNESS BENEFITS GROSS</b>	14204	4974	186
<b>DISABILITY BENEFITS GROSS</b>	14204	7407	251
<b>EDUCATION-RELATED ALLOWANCES GROSS</b>	14204	3141	103

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Table 8: Components of the income variables at personal level 2008

<b>EMPLOYEE CASH OR NEAR CASH INCOME NET</b>	114 753	14 889	986
<b>NON-CASH EMPLOYEE INCOME NET</b>	622	14 889	29
<b>CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET</b>	2 124	14 889	48
<b>CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET</b>	4 391	14 889	445
<b>VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION NET</b>	0	14 889	0
<b>PENSION FROM INDIVIDUAL PRIVATE PLANS NET</b>	2 086	14 889	91
<b>UNEMPLOYMENT BENEFITS NET</b>	2 431	14 889	103
<b>OLD-AGE BENEFITS NET</b>	27 122	14 889	453
<b>SURVIVOR' BENEFITS NET</b>	473	14 889	41
<b>SICKNESS BENEFITS NET</b>	3 184	14 889	123
<b>DISABILITY BENEFITS NET</b>	5 764	14 889	186
<b>EDUCATION-RELATED ALLOWANCES NET</b>	3 131	14 889	102
<b>EMPLOYEE CASH OR NEAR CASH INCOME GROSS</b>	159 332	14 889	1 540
<b>NON-CASH EMPLOYEE INCOME GROSS</b>	906	14 889	48
<b>CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS</b>	2 124	14 889	48
<b>CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS</b>	6 411	14 889	585
<b>VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION GROSS</b>	0	14 889	0
<b>PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS</b>	3 000	14 889	136
<b>UNEMPLOYMENT BENEFITS GROSS</b>	3 180	14 889	135
<b>OLD-AGE BENEFITS GROSS</b>	37 480	14 889	653
<b>SURVIVOR' BENEFITS GROSS</b>	644	14 889	56
<b>SICKNESS BENEFITS GROSS</b>	4 237	14 889	165
<b>DISABILITY BENEFITS GROSS</b>	7 631	14 889	249
<b>EDUCATION-RELATED ALLOWANCES GROSS</b>	3 137	14 889	103

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## 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 the event took place. The change in cut-off date in 1998 will have no effect on comparisons between years.

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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**

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 (ULF 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 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.

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

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 data are from 2005 and 2006 through face-to-face interviews and half of the interviews during 2006 was computer aid CATI. Telephone interviews with CATI are from 2007 on currently use as the main way to make interviews. Experiments with split samples have been carried out. The results indicate very little difference between the two interview methods. 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. (CAPI/CATI is not applied) followed by the Eurostat 21 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**

Table 9 : DB135 Household interview acceptance value = 1 (accept) DB135

	2005	2006	2007	2008	Total
<b>0</b>	567	628	778	748	2721
<b>1</b>	1729	1676	2179	1868	7452
<b>Total</b>	2296	2304	2957	2616	10173
	75,3%	72,7%	73,7%	71,4%	73,3%

Table 10 : RB100 Sample person or co resident value 1 = sample person, value 2 = co resident

RB100

	2005	2006	2007	2008	Total
<b>Sampled</b>	1729	1676	2179	1868	7452
<b>Coresident</b>	2679	2657	3309	2728	11373
<b>Total</b>	4408	4333	5488	4596	18825

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.

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**2.3.3.2 Unit non-response**

Table 11: Households and individuals non response rates NRh

2005-2006

res_05	res_06				
	Answer	Not found	Refused	Owercov	Total
Answer	1486	113	112	19	1730
Not found	132	131	31	17	311
Refused	48	31	149	4	232
Owercov	0	0	0	0	0
Total	1666	275	292	40	2273

2006-2007

res_06	res_07				
	Answer	Not found	Refused	Owercov	Total
Answer	1520	80	77	11	1688
Not found	90	134	35	5	264
Refused	56	26	206	3	291
Owercov	0	0	0	0	0
Total	1666	240	318	19	2243

2007-2008

res_07	res_08				
	Answer	Not found	Refused	Owercov	Total
Answer	1547	68	54	17	1686
Not found	66	139	33	3	241
Refused	83	37	200	2	322
Owercov	0	0	0	0	0
Total	1696	244	287	22	2249

2005	2006	2007	2008
1730	1486	1452	1409
100%	85,9%	83,9%	81,4%

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**2.3.3.3 Distribution of households (original units) by ‘record of contact at address’ (DB120), by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135), for each rotational group (if applicable) and for the total.**

DB110 Household status  
 DB120 Contac at address  
 DB130 Household questionnaire result

Table 12: Distribution of household by DB110 .

<b>2005</b>	Panel	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	
	4	1848	434	6	19	24	2	40	2373
<b>2006</b>	Panel	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	
	4	1477	255	0	25	12		64	1833
	5	1680	330	1	43	31		222	2307
<b>2007</b>	Panel	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	
	4	1255	275	0	16	22		71	1639
	5	1293	330	0	12	13		66	1714
	6	1626	359	1	22	31		244	2283
	Total	4174	964	1	50	66		381	5636
<b>2008</b>	Panel	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	
	5	1290	199	2	12	11		30	1544
	6	1360	178	2	13	13		50	1616
	7	2307	328	2	29	21		238	2925
	Total	4957	705	6	54	45		318	6085



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Table 13: Distribution of household by DB120

<b>2005</b>	<b>Panel</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	
	2	394	63		0	457
	3	414	53		3	470
	4	402	70		2	474
	Total	1210	186		5	1401

<b>2006</b>	<b>Panel</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	
	3	294				
	4	255				
	5	330				
	Total	879				

<b>2007</b>	<b>Panel</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	
	4	275			0	275
	5	330			0	330
	6	358			1	359
	Total	963			1	964

<b>2008</b>	<b>Panel</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>Total</b>
	5	2107	161	3	25	2296
	6	2106	176	1	21	2304
	7	2701	226	0	30	2957
	8	2399	182	1	31	2613
	Total	9313	745	5	107	10170

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Table 14: Distribution of household by DB130

<b>Panel 5</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	
<b>2005</b>	1742	5	0	0	0	1747
<b>2006</b>	1486	112	0	19	0	1617
<b>2007</b>	1367	53	0	18	0	1438
<b>2008</b>	1729	290	5	74	9	2107
<b>Total</b>	6324	460	5	111	9	6909

<b>Panel 6</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	
<b>2006</b>	1627	4	0	4	0	1635
<b>2007</b>	1404	94	0	15	0	1513
<b>2008</b>	1676	352	12	60	6	2106
<b>Total</b>	4707	450	12	79	6	5254

<b>Panel 7</b>	<b>11</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	
<b>2007</b>	2164	394	9	39	3	2609
<b>2008</b>	2179	429	20	66	7	2701
<b>Total</b>	4343	823	29	105	10	5310

**2.3.3.4. Distribution of persons for membership status (RB110)**

Table 15: distributions of person by memberships status RB110.

<b>2005</b>	Panel	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	
<b>4</b>		4149	3	86	41	487	8	4774
<b>5</b>		4506	0	0	0	0	0	4506
<b>6</b>		0	0	0	0	0	0	0
<b>Total</b>		8655	3	86	41	487	8	9280

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**2006** Panel

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	
<b>4</b>	3589	13	57	51	217	9	3936
<b>5</b>	3587	2	59	51	403	17	4119
<b>6</b>	4192	0	0	0	0	0	4192
<b>Total</b>	11368	15	116	102	620	26	12247

**2007** Panel

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	
<b>4</b>	3297	5	47	45	161	20	3575
<b>5</b>	3290	1	36	51	168	9	3555
<b>6</b>	3497	9	37	39	213	17	3812
<b>Total</b>	10084	15	120	135	542	46	10942

**2008** Panel

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	
<b>5</b>	3438	1	35	38	121	16	3649
<b>6</b>	3545	1	31	45	108	28	3758
<b>7</b>	5153	1	135	70	212	20	5591
<b>Total</b>	12136	3	201	153	441	64	12998

With the sampling design we just follow the selected persons and examine their household conditions. We do not examine persons (and their eventual households) who are excluded from the selected persons households during the interview.

**2.3.3.5 Item non-response**

For the respondent selected individuals we know all the individuals belonging to his household. For those households calculations of income variables are based on administrative register data. Imputation

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procedures are consequently not necessary. But for not respondent selected individuals we do not know the correct composition of their households, and therefore it is not meaningful to collect any information from any administrative register.

**2.4 Mode of data collection**

The main data collection method was personal interview during 2004-2005 and during 2006 was telephone interview. From 2007 mainly by telephone interview .

Table 16 : Distribution of households and individuals by RB250 data status

RB250 samples individual and co residents

Data Status value

Value 13 = information completed from both: interview and registers

Value 21= individual unable to respond

Value 23 = refusal to cooperate

Value 31-33 no contact or not completed

All households members

	<b>13</b>	<b>21</b>	<b>23</b>	<b>31</b>	<b>32</b>	<b>33</b>	
<b>2005</b>	6859	13	2	73	12	130	7089
<b>2006</b>	9157	0	0	0	0	0	9157
<b>2007</b>	8068	0	0	0	0	0	8068
<b>2008</b>	3695	0	0	0	0	0	3695
<b>Total</b>	27779	13	2	73	12	130	28009

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Sampled individuals

	<b>13</b>	<b>21</b>	<b>23</b>	<b>31</b>	<b>32</b>	<b>33</b>	
<b>2005</b>	3345	13	2	73	12	130	3575
<b>2006</b>	4583	0	0	0	0	0	4583
<b>2007</b>	4107	0	0	0	0	0	4107
<b>2008</b>	1868	0	0	0	0	0	1868
<b>Total</b>	13903	13	2	73	12	130	14133

Coo-residents

	<b>13</b>	<b>21</b>	<b>23</b>	<b>31</b>	<b>32</b>	<b>33</b>	
<b>2005</b>	3345	13	2	73	12	130	3575
<b>2006</b>	4583	0	0	0	0	0	4583
<b>2007</b>	4107	0	0	0	0	0	4107
<b>2008</b>	1827	0	0	0	0	0	1827
<b>Total</b>	13862	13	2	73	12	130	14092

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RB260 type of Interview

Data Status value 1 = face to face PAPI

Data bstatus value 3 = CATI

All households members

	<b>1</b>	<b>3</b>	<b>5</b>	<b>Total</b>
<b>2005</b>	5	6509	345	6859
<b>2006</b>	5	8868	284	9157
<b>2007</b>	0	7870	198	8068
<b>2008</b>	10	7209	226	7445
<b>Total</b>	20	30456	1053	31529

Sampled individuals

	<b>1</b>	<b>3</b>	<b>5</b>	<b>Total</b>
<b>2005</b>	2	3183	160	3345
<b>2006</b>	2	4461	120	4583
<b>2007</b>	0	4019	88	4107
<b>2008</b>	6	3618	103	3726
<b>Total</b>	10	15281	471	15761

Coo-residents

	<b>1</b>	<b>3</b>	<b>5</b>	<b>Total</b>
<b>2005</b>	3	3326	185	3514
<b>2006</b>	3	4407	164	4574
<b>2007</b>	0	3851	110	3961
<b>2008</b>	5	3592	123	3719
<b>Total</b>	11	15176	582	15768

**2.5 Imputation procedure**

See below

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## 2.6 Imputed rent

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.

## 2.7 Company car

The variable was only collected in 2007. Until this variable was included in Non Cash employee income PY020G / PY020Y.

# 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 is: year N

-The period for taxes on income and social insurance contributions is : year N

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 proceeding the month of the interview

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## **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 was 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**

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 with the exception of employers' social contributions.

## **3.3 Tracing rules**

The sampling unit is individual, and we include all household-members at the time when the sample is drawn the first year. During the following three year the sampled individuals are included in the panel



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wave, and there household-situation is examined. If there original household from the first year has been split, we only follow the sampled individual. The household-situation for not sampled household-members is not examined if they no longer belong to the household of the sampled individuals.

## **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.