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Göran Råbäck
Alvaro Miranda

Final Quality report for the Swedish EU-SILC
The 2004 – 2005 – 2006 -2007 longitudinal component
(Version 2)

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Göran Råbäck
Alvaro Miranda

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

The Swedish EU-SILC panel survey 2004, 2005, 2006 and 2007 were carried out as an integrated part of the Swedish survey of living conditions (ULF). For the longitudinal EU-SILC survey 2004-2005-2006-2007 we made a separate sample starting 2004 with four panels to rotate according to the regulations. 2005 panel2, panel3 and panel4 were included in the sample for the second time and panel 5 was included for the first time. 2006 panel 3 and panel 4 were included for the third time panel 5 for the second time and panel 6 was included for the first time. 2007 panel 4 was included for the fourth time panel 5 for the third time panel 6 for the second time and panel 7 was included for the first time.

The micro data registers transmitted to Eurostat contain all 2004-2005-2006-2007 longitudinal indicators stipulated in the regulation and for the first time comprises a panel of four years 2004-05-06-07 a indicator which reveal social exclusion its shows below what percent of population which at least has been two times in the longitudinal panel.

At-persistent-risk-of-poverty rate (by age and gender)		
Gender	Age	%
Both	total	7,4
	>18 years < 65 years	4,2
	> 65 years	17,0
Male	total	6,3
	>18 years < 65 years	4,8
	> 65 years	11,0
Female	total	8,5
	>18 years < 65 years	3,7
	> 65 years	22,0

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Average equivalised disposable income broken down by household size, age group and gender.

Cross 2004, 2005, 2006 and 2007 (households) Sw.Kr.

YEAR OF THE SURVEY	2004	2005	2006	2007
By household size				
1 household member	294937	300953	313597	308149
2 household members	315943	327800	356543	351994
3 household members	262173	278128	292781	286063
4 + household members	229212	227890	240864	235060
By age groups				
< 25	227347	235062	235602	220649
25 - 34	322635	333008	355451	325046
35 - 44	363942	364017	398737	390567
45 - 54	328590	342160	363544	371692
55 - 64	347907	349456	368810	378374
65 +	241727	257770	270754	279175
By sex				
Male	305535	314301	334350	333216
Female	295880	305159	323466	320052
Total	300538	309610	328816	326407

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 roles. 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 2005, 2006 and 2007 the ‘old’ panels were complemented with a sample

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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				Total
	4	5	6	7	
Respondent	1728	1696	1595	2164	7183
Not found	264	251	316	364	1195
Refused	331	323	368	394	1416
Over-coverage	27	21	25	53	126
Total	2350	2291	2304	2975	9920

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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 their 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.

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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 quote:

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

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).

2.1.9 Substitutions

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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 2004

Variable	N	Mean	Std Dev
HY010 TOTAL HOUSEHOLD GROSS INCOME	5748	410894,7	254424,8
HY020 TOTAL DISPOSABLE HOUSEHOLD INCOME	5748	282640,1	151553,4
HY022 TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS OTHER THAN OLDAGE AND SURVIVOR'S BENEFITS	5748	236977,6	156781,8
HY023 TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS INCLUDING OLDAGE AND SURVIVOR'S BENEFITS	5748	197340,4	175573,6
HY040G INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS	5748	445,9	5148,7
HY040N INCOME FROM RENTAL OF A PROPERTY OR LAND NET	5748	312,1	3604,1
HY050G FAMILY/CHILDREN RELATED ALLOWANCES GROSS	5748	12506,4	27597,9
HY050N FAMILY/CHILDREN RELATED ALLOWANCES NET	5748	11306,3	23459,8
HY060G SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS	5748	1680,5	12548,2
HY060N SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET	5748	1680,5	12548,2
HY070G HOUSING ALLOWANCES GROSS	5748	2082,3	7420,7
HY070N HOUSING ALLOWANCES NET	5748	2082,3	7420,7
HY080G REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS	5748	710,7	4444,4
HY080N REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET	5748	710,7	4444,4
HY090G INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS GROSS	5748	8089,5	34814,3
HY090N INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS NET	5748	5664,5	24369,7
HY100G INTEREST REPAYMENTS ON MORTGAGE GROSS	5748	10918,4	18661,5
HY100N INTEREST REPAYMENTS ON MORTGAGE NET	5748	7642,9	13063,1
HY110G INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS	5748	342,7	3863,7
HY110N INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET	5748	281,8	3287,4
HY120G REGULAR TAXES ON WEALTH GROSS	5748	7192,9	14248,5
HY120N REGULAR TAXES ON WEALTH NET	5748	7192,9	14248,5
HY130G REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS	5748	831,8	5033,3
HY130N REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET	5748	831,8	5033,3
HY140G TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS	5748	120227,6	102669,9
HY140N TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET	5748	120227,6	102669,9

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Table 2 : Components of the income variables at household level 2005

Variable	N	Mean	Std Dev
Y010 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 3 : Components of the income variables at household level 2006

Variable	N	Mean	Std Dev
 010 TOTAL HOUSEHOLD GROSS INCOME	6803	435983,6	295326,2
HY020 TOTAL DISPOSABLE HOUSEHOLD INCOME	6803	21,0	0,9
HY022 TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS OTHER THAN OLDAGE AND SURVIVOR'S BENEFITS	6803	298986,8	171772,2
HY023 TOTAL DISPOSABLE HOUSEHOLD INCOME BEFORE SOCIAL TRANSFERS INCLUDING OLDAGE AND SURVIVOR'S BENEFITS	6803	11,0	0,4
HY040G INCOME FROM RENTAL OF A PROPERTY OR LAND GROSS	6803	300,9	3170,8
HY040N INCOME FROM RENTAL OF A PROPERTY OR LAND NET	6803	210,6	2219,6
HY050G FAMILY/CHILDREN RELATED ALLOWANCES GROSS	6803	12038,8	27229,9
HY050N FAMILY/CHILDREN RELATED ALLOWANCES NET	6803	10687,7	22544,0
HY060G SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED GROSS	6803	1303,4	11016,5
HY060N SOCIAL EXCLUSION NOT ELSEWHERE CLASSIFIED NET	6803	1303,4	11016,5
HY070G HOUSING ALLOWANCES GROSS	6803	1845,0	7363,6
HY070N HOUSING ALLOWANCES NET	6803	1845,0	7363,6
HY080G REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED GROSS	6803	940,7	4896,6
HY080N REGULAR INTER-HOUSEHOLD CASH TRANSFER RECEIVED NET	6803	940,7	4896,6
HY090G INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS GROSS	6803	9957,0	75402,6
HY090N INTEREST, DIVIDENDS, PROFIT FROM CAPITAL INVESTMENTS IN UNINCORPORATED BUSINESS NET	6803	6971,7	52781,6
HY100G INTEREST REPAYMENTS ON MORTGAGE GROSS	6803	5703,5	10300,2
HY100N INTEREST REPAYMENTS ON MORTGAGE NET	6803	3992,5	7210,2
HY110G INCOME RECEIVED BY PEOPLE AGED UNDER 16 GROSS	6803	336,3	4261,9
HY110N INCOME RECEIVED BY PEOPLE AGED UNDER 16 NET	6803	272,6	3559,9
HY120G REGULAR TAXES ON WEALTH GROSS	6803	8346,9	24805,7
HY120N REGULAR TAXES ON WEALTH NET	6803	8346,9	24805,7
HY130G REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID GROSS	6803	292,1	2396,2
HY130N REGULAR INTER-HOUSEHOLD CASH TRANSFER PAID NET	6803	292,1	2396,2
HY140G TAX ON INCOME AND SOCIAL CONTRIBUTIONS GROSS	6803	128309,5	121803,0
HY140N TAX ON INCOME AND SOCIAL CONTRIBUTIONS NET	6803	128309,5	121803,0




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Table 4 : Components of the income variables at household level 2007

YEAR 2007			
Net	Number	Mean	Standard error
EMPLOYEE CASH OR NEAR CASH INCOME NET	14204	103565	925
NON-CASH EMPLOYEE INCOME NET	14204	1298	133
CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET	14204	2057	49
CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET	14204	4406	283
VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION NET	14204	0	0
PENSION FROM INDIVIDUAL PRIVATE PLANS NET	14204	1945	87
UNEMPLOYMENT BENEFITS NET	14204	3770	133
OLD-AGE BENEFITS NET	14204	26551	445
SURVIVOR' BENEFITS NET	14204	483	43
SICKNESS BENEFITS NET	14204	3611	135
DISABILITY BENEFITS NET	14204	5536	186
EDUCATION-RELATED ALLOWANCES NET	14204	3125	102
gross			
EMPLOYEE CASH OR NEAR CASH INCOME GROSS	14204	149726	1479
NON-CASH EMPLOYEE INCOME GROSS	14204	2123	273
CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS	14204	2057	49
CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS	14204	6465	437
VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION GROSS	14204	0	0
PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS	14204	2817	132
UNEMPLOYMENT BENEFITS GROSS	14204	5044	178
OLD-AGE BENEFITS GROSS	14204	36692	636
SURVIVOR' BENEFITS GROSS	14204	670	60
SICKNESS BENEFITS GROSS	14204	4974	186
DISABILITY BENEFITS GROSS	14204	7407	251
EDUCATION-RELATED ALLOWANCES GROSS	14204	3141	103

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Table 5 : Components of the income variables at personal level 2004

		N	Mean	Std Dev
  ari				
 PY010G	EMPLOYEE CASH OR NEAR CASH INCOME GROSS	11373	139082,4	161383,1
PY010N	EMPLOYEE CASH OR NEAR CASH INCOME NET	11373	95182,9	101497,8
PY020G	NON-CASH EMPLOYEE INCOME GROSS	11373	1984,5	10188,1
PY020N	NON-CASH EMPLOYEE INCOME NET	11373	1261,2	6229,8
PY035G	CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS	11373	2012,3	5317,6
PY035N	CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET	11373	2012,3	5317,6
PY050G	CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS	11373	5757,2	46870,4
PY050N	CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET	11373	3826,8	29051,9
PY080G	PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS	11373	1928,5	14894,6
PY080N	PENSION FROM INDIVIDUAL PRIVATE PLANS NET	11373	1328,3	9655,4
PY090G	UNEMPLOYMENT BENEFITS GROSS	11373	4662,7	20665,8
PY090N	UNEMPLOYMENT BENEFITS NET	11373	3417,1	15123,4
PY100G	OLD-AGE BENEFITS GROSS	11373	27241,9	65713,7
PY100N	OLD-AGE BENEFITS NET	11373	19619,9	45709,2
PY110G	SURVIVOR' BENEFITS GROSS	11373	549,8	6234,6
PY110N	SURVIVOR' BENEFITS NET	11373	413,0	4539,2
PY120G	SICKNESS BENEFITS GROSS	11373	6428,5	26234,2
PY120N	SICKNESS BENEFITS NET	11373	4624,4	18846,5
PY130G	DISABILITY BENEFITS GROSS	11373	5750,1	25987,1
PY130N	DISABILITY BENEFITS NET	11373	4287,2	19264,6
PY140G	EDUCATION-RELATED ALLOWANCES GROSS	11373	3143,4	11840,3
PY140N	EDUCATION-RELATED ALLOWANCES NET	11373	3133,6	11785,6

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Table 6 : Components of the income variables at personal level 2005

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

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Table 7 : Components of the income variables at personal level 2006

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

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Table 8: Components of the income variables at personal level 2007

<u>Components of the income variables at personal level</u>			
year 2007	number	mean	standard error
EMPLOYEE CASH OR NEAR CASH INCOME NET	14204	103565	925
NON-CASH EMPLOYEE INCOME NET	14204	1298	133
CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS NET	14204	2057	49
CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT NET	14204	4406	283
VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION NET	14204	0	0
PENSION FROM INDIVIDUAL PRIVATE PLANS NET	14204	1945	87
UNEMPLOYMENT BENEFITS NET	14204	3770	133
OLD-AGE BENEFITS NET	14204	26551	445
SURVIVOR' BENEFITS NET	14204	483	43
SICKNESS BENEFITS NET	14204	3611	135
DISABILITY BENEFITS NET	14204	5536	186
EDUCATION-RELATED ALLOWANCES NET	14204	3125	102
EMPLOYEE CASH OR NEAR CASH INCOME GROSS	14204	149726	1479
NON-CASH EMPLOYEE INCOME GROSS	14204	2123	273
CONTRIBUTIONS TO INDIVIDUAL PRIVATE PENSION PLANS GROSS	14204	2057	49
CASH BENEFITS OR LOSSES FROM SELF-EMPLOYMENT GROSS	14204	6465	437
VALUE OF GOODS PRODUCED BY OWN-CONSUMPTION GROSS	14204	0	0
PENSION FROM INDIVIDUAL PRIVATE PLANS GROSS	14204	2817	132
UNEMPLOYMENT BENEFITS GROSS	14204	5044	178
OLD-AGE BENEFITS GROSS	14204	36692	636
SURVIVOR' BENEFITS GROSS	14204	670	60
SICKNESS BENEFITS GROSS	14204	4974	186
DISABILITY BENEFITS GROSS	14204	7407	251
EDUCATION-RELATED ALLOWANCES GROSS	14204	3141	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 ours 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 2004 to 2006 through face-to-face interviews. The interview form has been specially designed for this type of survey. Telephone interviews with computer aid CATI is now currently use as the main way to make interviews and half of the interviews during 2006 was CATI . 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 21control 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.

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2.3.3 Non-response errors

2.3.3.1 Achieved sample size

Table 9 : DB 135 Household interview acceptance value = 1 (accept)

DB135

Year	2004	2005	2006	2007	
Int accept	1786	3345	4583	4107	13821
Total	1803	3575	5037	4624	15039
	99,06	93,57	90,99	88,82	91,90%

Table 10 : RB 100 Sample person or co resident value 1 = sample person, value 2 = co resident

Bb100

Year	2004	2005	2006	2007	
Sampled	1803	3575	4600	4132	14110
coresident	2760	5715	7647	6810	22932
Total	4563	9290	12247	10942	37042

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

2.3.3.2 Unit non-response

Table 11: Households and individuals non response rates NRh

Households

2004-2005

	Answers	Not found	Refused	Ower-cov	
Res 2004					
Res 2005	0	0	0	17	124
Answers	1979	230	200	14	2464
Not found	266	243	100	0	631
Refused	228	76	334	1	649
Ower-cov	33	17	4	4	60
	2506	566	638	36	3928

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2005-2006

Res 2004	Ansvers	Not found	Refused	Ower-cov	
Res 2005	5	1	0	33	39
Ansvers	1790	100	87	0	1977
Not found	97	128	14	0	239
Refused	69	27	125	0	221
Ower-cov	18	10	2	0	30
	1979	266	228	33	2506

2006-2007

Res 2004	Ansvers	Not found	Refused	Ower-cov	
Res 2005	13	3	0	18	39
Ansvers	1612	49	24	0	1685
Not found	93	29	7	0	129
Refused	54	14	36	0	104
Ower-cov	18	2	2	0	22
	1790	97	69	18	1979

2004	2005	2006	2007
2506	1979	1790	1602
100,0%	79,0%	71,4%	63,9%
	100,0%	90,4%	80,9%
		100,0%	89,5%

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

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Table 12: Distribution of household by DB110 .

2005	Panel	1	2	3	4	5	6	7	
	4	1848	434	6	19	24	2	40	2373

2006	Panel	1	2	3	4	5	6	7	
	4	1477	255	0	25	12		64	1833
	5	1680	330	1	43	31		222	2307

2007	Panel	1	2	3	4	5	6	7	
	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

Table 13: Distribution of household by DB120

2004	Panel	11	21	22	23	
	2	2109	213	1	27	2350
	3	2096	226	3	25	2350
	4	2116	206	2	26	2350
	Total	6321	645	6	78	7050

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

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2006 Panel **11** **21** **22** **23**

3	294
4	255
5	330
Total	879

2007 Panel **11** **21** **22** **23**

4	275
5	330
6	358
Total	963

0	275
0	330
1	359
1	964

Table 14: Distribution of household bay variable questionnaire result DB130

Panel 4 **11** **21** **22** **23** **24**

2004	1786	0	0	0	0	1786
2005	1603	92	6	13	2	1716
2006	1470	62	0	23	0	1555
2007	1336	45	0	17	0	1398
Total	6195	199	6	53	2	6455

Panel 5 **11** **21** **22** **23** **24**

2005	1742	5	0	0	0	1747
2006	1486	112	0	19	0	1617
2007	1367	53	0	18	0	1438
Total	4595	170	0	37	0	4802

Panel 6 **11** **21** **22** **23** **24**

2006	1627	4	0	4	0	1635
2007	1404	94	0	15	0	1513
Total	3031	98	0	19	0	3148

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2.3.3.4. Distribution of persons for membership status (RB110)

Table 15: distributions of person by memberships status RB110.

2004	Panel	1	2	3	4	5	6	
	4	4535	0	0	0	0	0	4535
	5	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0
	Total	4535	0	0	0	0	0	4535

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

2006	Panel	1	2	3	4	5	6	
	4	3589	13	57	51	217	9	3936
	5	3587	2	59	51	403	17	4119
	6	4192	0	0	0	0	0	4192
	Total	11368	15	116	102	620	26	12247

2007	Panel	1	2	3	4	5	6	
	4	3297	5	47	45	161	20	3575
	5	3290	1	36	51	168	9	3555
	6	3497	9	37	39	213	17	3812
	Total	10084	15	120	135	542	46	10942

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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 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. When we contact the selected individuals, we offer the possibility of face-to-face interview as a second alternative if the respondents prefer this for practical reasons. This strategy we use to avoid non response as much as possible.

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

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

All households members

	13	21	23	31	32	33	
2004	3606	0	0	0	0	17	3623
2005	6859	13	2	73	12	13 0	7089
2006	9157	0	0	0	0	0	9157
2007	8068	0	0	0	0	0	8068
Total	27690	13	2	73	12	14 7	27937

Sampled individuals

	13	21	23	31	32	33	
2004	1786	0	0	0	0	17	1803
2005	3345	13	2	73	12	13 0	3575
2006	4583	0	0	0	0	0	4583
2007	4107	0	0	0	0	0	4107
Total	13821	13	2	73	12	14 7	14068

Coo-residents

2004					1320
All households members					3514
	1	3	5	Total	
2004	0	3416	190	3606	
2005	5	6509	345	6859	
2006	5	8868	284	9157	
2007	0	7870	198	8068	
Total	10	26663	1017	27690	

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Sampled individuals				
	1	3	5	Total
2004	0	1705	81	1786
2005	2	3183	160	3345
2006	2	4461	120	4583
2007	0	4019	88	4107
Total	4	13368	449	13821
Coo-residents				
	1	3	5	Total
2004	0	1711	109	1820
2005	3	3326	185	3514
2006	3	4407	164	4574
2007	0	3851	110	3961
Total	6	13295	568	13869
2005				
2006				
2007				
Total				
				4574
				3961
				13869

RB260 Type of interview

Data value 1= Face to face interview PAPI

Data value 3 = Telephone interview CATI

Table 18: Distribution of households and individuals by RB260

All households members

	1	3	5	Total
2004	0	3416	190	3606
2005	5	6509	345	6859
2006	5	8868	284	9157
2007	0	7870	198	8068
Total	10	26663	1017	27690

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Sampled individuals	1	3	5	Total
2004	0	1705	81	1786
2005	2	3183	160	3345
2006	2	4461	120	4583
2007	0	4019	88	4107
Total	4	13368	449	13821

Coo-residents	1	3	5	Total
2004	0	1711	109	1820
2005	3	3326	185	3514
2006	3	4407	164	4574
2007	0	3851	110	3961
Total	6	13295	568	13869

2.5 Imputation procedure

See below

2.6 Imputed rent

Imputed rent (HY030) was calculated by using variables HH010, HH020, HH030 and a variable based on regional classifications described, the dwelling costs were imputed from our national household budget survey and our national housing survey.

2.7 Company car

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

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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 – 1

-The period for taxes on income and social insurance contributions is : Year N-1

The lag between the income reference period and current variables

-The field work is carried out during January-December year N.

The total duration of the data collection of the sample

-The data collection was 12 month, January-December

The basic information on activity status during the income reference period

-The twelve calendar months preceding the month of the interview

3.2 Components of income

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

Only minor deviations with little impact on the results:

Non-cash employee income includes more than company car (housing cost/ interest on loans below market price etc).

Regular inter-household cash transfers paid/received do only consider transactions between parents not living together. Other types of alimonies or cash transfers are not included.

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Imputed rent (HY030) was calculated by using variables HH010, HH020, HH030 and a variable based on regional classifications described, the dwelling costs were imputed from our national household budget survey and our national housing survey.

3.2.2 The source or procedure used for collection of income variables

The income variables as well as wealth and taxes are collected by administrative registers and one of the important sources is the register of The Swedish National tax Agency and other 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 contribution

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 years the sampled individuals are included in the panel wave, and their household-situation is examined. If their 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.