Statistics Netherlands

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EU-SILC 2007

The Netherlands

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Preface

In recent years, Statistics Netherlands has focused on an increased use of register data instead of survey data in the production process of statistical information. By making efficient use of register data, Statistics Netherlands intends to improve the accuracy of the statistical information and, at the same time, to decrease the response burden on households. Examples of administrative registrations are the Population Register and data on social security and taxes from the tax administration. The Population Register contains information on age, sex, ethnicity, place of birth, place of residence, marital status and other information for all (registered) persons living in the Netherlands. This registration has been available from 1995 onwards, and is updated monthly. The Labour Force Survey (LFS) is one of the social statistical databases that are linked to the GBA. The design of the LFS is based on a face-to-face interview (CAPI), followed by a four-wave panel by telephone interview (CATI).

The EU-SILC was conducted for the first time in 2005. And for various reasons (costs, response burden, available information), it was decided to consider the option of using the fifth wave LFS-respondents as the EU-SILC sampling frame. In doing so, a relatively short telephone-interview (on average 14 minutes) was sufficient to collect the additional EU-SILC information. Consequently, all information based on the Population Register, register data on income and the LFS was matched to to the EU-SILC respondents.

Statistics Netherlands implemented the integrated four-year rotational design which means that the cross-sectional en longitudinal EU-SILC data are based on the same set of sample observations. Rotational design refers to the sample selection based on a number of subsamples or replications. Once the system is fully established (from year 4 onwards) the sample for any one year consists of four replications which have been in the survey for 1, 2, 3 or 4 years. Each year one of the four replications is dropped and replaced by a new one. Thus, sample persons in two rotational groups of the initial sample in 2005 were asked to take part in the second follow-up interview in 2007. One rotational group contains sample persons being re-interviewed for the first time (first wave in 2006) and one rotational group consists of a new sample persons who were drawn from the Labour Force Survey.

Preface

1.   Common longitudinal European Union Indicators

Not applicable at this third wave of the EU-SILC operation.

2.   Accuracy

2.1   Sampling design

The EU-SILC survey is an annual survey with a four-year rotational panel and has been carried out as an integrated survey, covering both cross-sectional and longitudinal primary target variables by a single operation. The cross-sectional sample of SILC 2007, the third year of EU-SILC in the Netherlands, consists of two "old" rotational groups (R3,R4) which took part in SILC 2005. Group $R1^1$ entered the survey in 2006 and sample persons in group $R2^1$ were interviewed for the first time in 2007.

Figure 2.1. Rotational design EU-SILC

Cross-sectional sample 2005	R1	R2	R3	R4	
Cross-sectional sample 2006		R2	R3	R4	$R1^1$
Cross-sectional sample 2007			R3	R4	$R1^1$	$R2^1$

2.1.1   Type of sampling

Sample persons in the new rotational group 2 $(R2^1)$ were partly drawn from the Labour Force Survey (LFS). The LFS sample was drawn from the sampling frame of addresses. This sampling frame was constructed from the Population Register, and is updated monthly.

The sampling design can be classified as a two-stage sampling design, with municipalities as primary sampling units and addresses as secondary sampling units. The systematic sampling of first stage elements is with probability proportional to size (number of addresses per municipality), while the second stage elements are selected with simple random sampling such that the total sampling design becomes self-weighting. The primary sampling units are stratified according to a combination (crossing) of two regional attributes, COROP and interviewer region; the regions are non-overlapping. From the addresses further sampling units are constructed: households. For the measurement of detailed information on social variables one member of the household aged 16 or older is selected (the selected respondent).

2.1.2 Sampling units

The sampling units are addresses that are registered in the sampling frame. All households on selected addresses are eligible for the survey, up to a maximum of three households per address.

2.1.3 Stratification criteria

The stratification variables are the regional variables COROP (40 regions) and interviewer region. The strata are constructed by crossing these variables. Applying this type of stratification allows for representative samples on a regional level. Moreover, this type of stratification makes it possible to use fixed size samples for each of the interviewer regions.

2.1.4 Sample size and allocation criteria

Member states have to achieve a minimum effective sample size for the cross-sectional and longitudinal sample. For the Netherlands the net cross-sectional sample size is 6,500 households and 6,500 selected persons over 15 (concerning the measurement of social variables). Correcting for estimated design effects, the minimum achieved sample size should be 8,500 households and 8,500 selected persons over 15 years of age (a justification of this figure will be given in section 2.1.8.1). Similar considerations apply to the longitudinal sample: in this case the net sample size is 5,000 households and 5,000 selected persons over 15, and the achieved sample size should be 6,500 households and 6,500 selected persons over 15.

The sampling design is partly based on the design for the Labour Force Survey (LFS), which has a panel structure. In the first wave, interviews are conducted through face-to-face interviewing. Four subsequent waves are conducted through telephone interviewing. The period between waves is three months. Households that have taken part in all five waves of the labour force survey are recruited for the EU-SILC survey. If a household is willing to participate, it is contacted in the month following the fifth and final LFS interview.

After the first wave of the LFS, addresses with all residents aged over 64 are removed from the sample. An extra sample is required for this type of households. We therefore distinguish between two EU-SILC samples: the first sample represents the set of addresses with households that have participated in the LFS survey. At least one of the household members is aged 64 years or less. The allocation of this sample is illustrated in table 2.1. The second sample is a set of addresses with all residents aged over 64. The allocation of this sample is illustrated in table 2.2. Both samples are based on the sample selection scheme of section 2.1.5.

In 2007, 9,981 households in the fifth wave of the LFS were recruited for the EU-SILC survey (the new rotational group R2'). Eventually 3,106 households completed the household questionnaire.

Households in the LFS-sample which did not respond to the LFS-survey or which have not been used for recruiting EU-SILC respondents have not been registered in the EU-SILC household register (D-file). Only households which were actually used for EU-SILC are registered in this register.

Table 2.1: sample size sample 1; at least one resident aged below 65

Addresses used for recruiting EU-SILC households	*9,981*
willing to participate in EU-SILC survey	7,485
not willing to participate	2,496
Willing to participate in EU-SILC	*7,485*
addresses used by the institute for EU-SILC	3,475
addresses not used by the institute for EU-SILC	4,010
Addresses used by the institute for EU-SILC	*3,475*
addresses successfully contacted for EU-SILC	3,290
addresses not successfully contacted	185
Addresses successfully contacted for EU-SILC	*3,290*
household questionnaire EU-SILC completed	3,160
refusal to co-operate	54
household temporarily away for duration of fieldwork	
unable to respond	4
other reasons	72
Household questionnaire completed	*3,290*
accepted for database	3,106
interview rejected	54

All of the issued addresses in the second sample (addresses with all residents aged 64 years and over) were used. Eventually, 625 household interviews were accepted for the database. Combining both samples, the number of accepted household interviews in the new rotational group (R2') is 3,731.

Table 2.2. sample size sample 2; all residents at address are 65 or older.

Issued addresses	*1295*
addresses used by the institute	1295
addresses not used by the institute	0
Addresses used by the institute	*1295*
addresses successfully contacted	1225
addresses not successfully contacted	70
Addresses successfully contacted	*1295*
household questionnaire EU-SILC completed	666
refusal to co-operate	402
household temporarily away for duration of fieldwork	
unable to respond	119
other reasons	38
Household questionnaire completed	*666*
accepted for database	625
interview rejected	41

2.1.5 Sample selection scheme

As stated before, the primary sampling units are selected by means of systematic sampling with probability proportional to size. Therefore the ordering of these units in the strata is relevant: the primary sampling units in each of the strata are randomly ordered. The secondary sampling units are selected with simple random sampling in order that the total sampling design becomes self-weighting.

Addresses corresponding to institutions, addresses that have been part of a survey sample in the previous year, and addresses in some small regions of the national territory (West Frisian Islands) are removed from the sample. These addresses are not part of the reference population. In the case of sample 1, a number of sampling units in each of the interviewer regions is randomly removed in order to fit the sample with the available face-to face interview capacity. The sampling design for this sample is therefore no longer strictly self-weighting. In the case of sample 2 the datacollection process has been conducted by telephone interviewing. Only addresses with all residents aged over 64 were selected. The resulting samples represent the sets of issued addresses in tables 2.1 and 2.2.

2.1.6 Sample distribution over time

The following tables provide an overview of the cumulative sample development (all rotational groups) during the fieldwork period from 1 June 2007 to 5 October 2007.
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Table 2.3: cumulative sample size over time, EU-SILC sample 1

Fieldwork from .. to ..	Processed addresses	Accepted interviews
01/06 – 30/06	2,495	1,436
01/06 – 31/07	5,263	3,802
01/06 – 31/08	6,817	5,917
01/06 – 05/10	10,146	8,782

Table 2.4: cumulative sample size over time, EU-SILC sample 2

Fieldwork from .. to ..	Processed addresses	Accepted interviews
01/06 – 30/06	431	382
01/06 – 31/07	1,281	730
01/06 – 31/08	2,044	1,175
01/06 – 05/10	2,371	1,437

2.1.7   Renewal of samples: rotational groups

In the Netherlands, 2005 was the first year of EU-SILC. A new sample was constructed and divided into four subsamples (rotational groups). One of the subsamples was purely cross-sectional and was not followed up in 2006. Respondents in the second subsample will participate for two years, in the third subsample for three years, and in the fourth subsample for four years. In order to compensate for panel attrition, the subsamples are chosen to be of different sizes: subsamples of respondents that participate longer in the EU-SILC survey are therefore larger. Because accurate panel attrition rates were not available in the first year of the EU-SILC survey, the subsample sizes are chosen to be of quite different sizes in order to guarantee a longitudinal sample of sufficient size. The longitudinal 2006-2007 sample consists of 6,488 households (rotational groups R1',R3 and R4) with accepted interviews in 2006 and in 2007.

Table 2.5: size of rotational groups EU-SILC 2007

	Total	R1'	R2'	R3	R4
Used addresses	12,517	2,266	4,770	2,261	3,220
Successfully contacted addresses	11,612	2,066	4,515	2,090	2,941
Accepted household interviews	10,219	1,876	3,731	1,909	2,703

2.1.8   Weighting

In this paragraph the computation of cross-sectional weights will be discussed. These weights were calculated in compliance with the Eurostat recommendations for these calculations.

2.1.8.1 Design factor

The design factor (or design effect) expresses the loss in precision due to the actual sampling design, as compared to a single random sampling (SRS) design. As such, it plays an important role in determining the required sample size. The design factor can be calculated as the ratio of the variance (of a particular estimator), obtained under the actual design, to the variance obtained by SRS. Here, the design factor for the total at-risk-of-poverty rate is presented. The calculation of the design factor proceeds as follows. The variance obtained under the actual design is found by squaring the corresponding standard error listed in table 2.6 (see section 2.2.1). Next, in order to compute the variance that would have been obtained from a single random sample, a resampling method is used to simulate such a sample from the actual sample file. The simulated single random sample is subsequently used to infer the SRS variance, following the same strategy as outlined in section 2.2.1. With the thus found variance, the resulting design factor for the at-risk-of-poverty rate was 1.24 for the EU-SILC 2006 operation. For 2007, the design effect has not been calculated yet.

2.1.8.2 Non-response Adjustments

Non-response adjustments are necessary because of the bias introduced by selective non-response on the household level. Selective non response affects the inclusion probabilities of the sampling units. Ideally the inclusion probability can be calculated by multiplying the inclusion probabilities of the sampling design with the exact response probabilities. Unfortunately, in practice these response probabilities are unknown and some kind of approximation has to be made.

The method of logistic regression was adopted to approximate the response probabilities for the new rotational group. The response probabilities were modelled by the explanatory variables age, degree of urbanisation, type of household, and labour force status. For the old rotational groups a proper model could not be fitted using logistic regression. Therefore the response probabilities were considered equal for all persons in the response.

2.1.8.3 Adjustments to external data

For each rotational group adjustments to external data were made to calculate the base weights. The basis for this base weight (RB060) in year t is the cross-sectional weight (RB050) in t-1. These weights were scaled to the longitudinal population in scope. The calibration was performed on household and personal level using linear consistent weighting, so that individuals within the household have identical weights.

The following variables were included in the calibration scheme:

- Household size : 1 household member, 2 household members 3 household members, 4 or more household members
- Sex:
- Age class : $0 – 15$, $16 – 19$, $20 – 24$, $25 – 29$, $30 – 34$, $35 – 39$, $40 – 44$, $45 – 49$, $50 – 54$, $55 – 59$, $60 – 64$, $65 – 69$, $70 – 74$, 75 years or older.

For each rotational group and each wave, the sum of the weights RB060 is equal to the size of the longitudinal population in scope. The base weights of year t +1 are based on the cross-sectional weights (RB050) of year t. For the rotational groups 3 and 4 the sum of the base weights is equal to the size of the longitudinal population in scope in 2005-2007. With respect to group 1' (first wave in 2006) the sum of the weights is equal to the size of the longitudinal population in scope from 2006 to 2007. Household Members with RB110 = 3, 5, 6 or 7 (moved into from outside sample, moved out, died or not in register) have a zero weight and members with RB110=4 (newly born) received the weight of their mother.

2.1.8.4 longitudinal weights

Every year, three sets of longitudinal weights are calculated for the persons in the participating panels in the relevant period. These weights are rb062 (two years), rb063 (three years) and rb064 (four years). For the 2007-operation, the third wave of EU-SILC, only RB062 and RB063 are applicable.

2.1.8.5 Non-response Adjustments

For the "old" rotational groups a proper model using logistic regression could not be fitted to approximate the response probabilities. Therefore the response probabilities were considered equal for all persons in the response.

2.1.8.6 Adjustments to external data

see section 2.1.8.8

2.1.8.7. Final longitudinal weights

The basis for the weight DB090 in the longitudinal files is the weight DB090 from the cross-sectional files. However, these weights are now summing to a total less than the household population, because the longitudinal file consists of only three rotational groups (R4,R3 and R1'). Therefore, variable DB090 had to be expanded with a scale factor. With this scale factor the sum of the weights for the rotational groups 1', 3 and 4 together is equal to the cross-sectional household population size.

Table 2.6: Household weight in longitudinal file 2005-2007

	2005	2006	2007
Accepted household interviews (R1', R3, R4)	7,068	7,935	6,488
Sum of cross-sectional weights	5,971,249	7,718,078	4,711,979
Number of households in population	7,090,965	7,146,088	7,190,543
Scale factor	1.19	0.93	1.53

The two and three-year duration longitudinal personal weights (RB062 and RB063) have only values for 2007 as this correspond to the last wave in the file. With respect to RB062 the sum of the weights, all rotational groups together, is equal to the size of the longitudinal population of individuals in scope in 2006 and 2007. Concerning RB063 this sum is equal to the size of the longitudinal population 2005-2007. Individuals in scope are the ones with RB110 = 1 or 2 in 2007. Members with RB110 = 3, 4, 5, 6 or 7 (moved into from outside sample, newly born, moved out, died or not in register) have a zero weight.

2.1.8.8. Final household cross-sectional weight

Final cross sectional weights were obtained by a calibration of the joint cross-sectional and longitudinal sample. Adjustments made by calibration schemes in general improve the accuracy of the data (mean square error). Three good reasons for using calibration schemes are: 1) the estimates of variables that are used in the calibration scheme are made consistent with those of more reliable sources. 2) the standard error of the estimates is reduced if the calibration variables correlate with target variables. 3) non-response bias is reduced if the calibration variables correlate with both target variables and response probabilities.

Two external data sources were used in the calibration procedure:
1. the Population Register (GBA), and
2. the register on income data based on integral data from the tax authorities in 2004.

The adjustments were made on the basis of the base weights: the product of the design weights with the inverse of the response probabilities (non-response weights). The calibration was performed on household and personal level using linear consistent weighting, so that individuals within the household have identical weights equal to the household weight. The set of variables used for calibration includes the smaller subset suggested by Eurostat in document EU-SILC 065/04. Additional calibration variables that correlate strongly with the target variables were added: income data and data on tenure status from the income register. The following variables were included in the calibration scheme:
- sex,
- age in years, 0,1,2,3,4 thru 84 and 85 years and over,
- household level: four categories (1, 2, 3, 4 and more household members),
- region: 12 categories, one for each of the provinces (nuts 2),
- tenure status, in two classifications (owner, tenant)
- equivalized disposable income (CBS-definition) in deciles
- main source of income (employee, self-employed, unemployed, social assistance, disabled, retired aged under 65, retired aged 65 years or older, student, no income).
- low income category, in three classifications (non target population, low income and other income).
- at-risk of poverty-rate (based on Income Panel Survey, national definition)

Taking into account consistency requirements and the correlation of weighting terms with important target variables (Laeken indicators), the following weighting terms were constructed:

weighting model terms at household level:
- household size,
- region (nuts 2),
- tenure status
- low income category.

weighting model terms at personal level:
- sex x age,
- equivalized income (decile groups),
- main source of income
- at-risk-of poverty-rate IPS

The household cross-sectional weight DB090 and the personal cross-sectional weight RB050 are the direct result of the linear consistent weighting procedure. PB040 equals this weight for persons of 16 years and older. PB040 equals 0 for people younger than 16 years.

Finally, the cross-sectional weights for the selected respondent are determined by adjusting the weight PB040 for the probability with which this respondent is selected within the household. This probability is equal for all persons that are older than 16. This probability is four times as large for persons that are exactly 16 years.

2.1.8.9 Substitutions

Not applicable.

2.2   Sampling errors

2.2.1. Standard errors and effective sample size

The subsequent tables present means, number of observations and standard errors for the cross sectional component 2007 and for each wave of the longitudinal component. The standard errors have been calculated with the use of the software package Bascula which has been developed by the methodology department at Statistics Netherlands. Using Bascula one can calculate (weighted) totals, means, ratios and the standard errors of target variables for a variety of sampling designs and weighting models.

Table 2.7: Mean, number of Observations, and standard errors for household income components EU-SILC cross-sectional 2007

Gross income components at household level	**Mean (euro)**	**N**	**Standard Error**
Total household gross income (hy010)	47,116	10,219	281
Total disposable household income (hy020)	32,409	10,219	200
Total disposable household income before social transfers other than old age and survivors' benefits (hy022)	29,593	10,219	203
Total disposable household income before social transfers including old age and survivors' benefits (hy023)	23,913	10,219	210
Gross income components at household level			
Imputed Rent (hy030g)	2,481	7,018	16
Income from rental of property or land (hy040g)	8,221	347	1006
Family/child related allowances (hy050g)	1,689	3,620	11
Social exclusion not elsewhere classified (hy060g)	7,834	679	192
Housing allowances (hy070g)	1,797	875	35
Regular inter-household cash transfer received (hy080g)	4,034	643	249
Interest, dividends, profit from capital investments (hy090g)	2,482	8,943	217
Interest repayments on mortgage (hy100g)	7,497	6,414	150
Income received by people aged under 16 (hy110g)	1,363	177	490
Regular taxes on wealth (hy120g)	-	-	-
Regular inter-household cash transfer paid (hy130g)	3,996	1,252	191
Tax on income and social contributions (hy140g)	14,278	10,219	136

Table 2.8: Mean, number of observations, and standard errors for personal income components, EU-SILC cross-sectional 2007

Gross income components at personal level	Mean (euro)	N	Standard Error
Employee cash or near cash income (py010g)	26,986	13,431	216
Non-cash employee income (py020g)			
Contributions to individual private pension plans (py035g)	2,993	2,677	121
Cash benefits or losses from self-employment (py050g)	16,129	1,879	868
Value of goods produced for own-consumption (py070g)	-	-	-
Pension from individual private plans (py080g)	10,497	83	1244
Unemployment benefits (py090g)	7,982	849	295
Old-age benefits (py100g)	17,087	3,947	233
Survivor's benefits (py110g)	9,917	169	395
Sickness benefits (py120g)	2,946	299	262
Disability benefits (py130g)	11,855	964	315
Education-related allowances (py140g)	2,966	994	72

Table 2.9: Mean, number of observations, and standard error for the equivalized disposable income, cross-sectional 2007).

Equivalized disposable income	Mean	Number of Observations	Standard Error
Population by household size			
1 household member	19,018	2,448	471
2 household members	22,805	7,280	269
3 household members	22,164	3,972	455
4 and more household members	19,464	12,052	221
Population by age groups			
<25	18,806	8,328	162
25-34	21,520	2,692	234
35-44	21,472	4,482	320
45-54	23,027	4,172	361
55-64	24,377	3,441	591
65+	18,282	2,637	285
Population by sex			
Male	21,310	12,765	158
Female	20,331	12,987	136
Total	20,816	25,752	113

Table 2.9: Mean, number of observations, and standard errors for income components and equivalized disposable income EU-SILC 2007, rotational group R1', 3 and 4.

	R4			R3			R1'		
	Mean	Number of observations	standard error	Mean	Number of observations	standard error	Mean	Number of observations	standard error
HY010	47,385	2,703	786	48,614	1,909	948	50,158	1,876	1,007
HY020	32,534	2,703	461	33,424	1,909	677	34,391	1,876	739
HY022	29,700	2,703	494	30,722	1,909	723	31,774	1,876	765
HY023	23,739	2,703	473	24,848	1,909	713	25,608	1,876	748
HY030G	2,492	1,917	36	2,530	1,339	41	2,489	1,285	35
HY040G	5,692	104	883	9,683	71	3,132	12,894	50	3,631
HY050G	1,718	1,036	25	1,624	754	31	1,698	599	28
HY060G	7,564	179	511	7,773	115	708	6,545	117	748
HY070G	1,771	198	77	1,863	158	75	1,705	170	71
HY080G	5,075	161	606	2,754	117	279	4,851	104	506
HY090G	2,121	2,399	355	2,946	1,709	609	2,993	1,643	692
HY100G	7,399	1,761	319	7,596	1,225	2,588	7,293	1,156	180
HY110G	668	59	111	4,133	39	2,595	622	26	136
HY120G									
HY130G	3,324	342	224	5,414	226	814	4,306	240	427
HY140G	14,479	2,703	388	14,650	1,909	396	15,260	1,876	358
PY010G	27,116	3,756	578	27,057	2,588	491	28,061	2,321	523
PY021G	4,850	276	264	5,363	182	673	5,148	202	439
PY030G	5,443	4,109	101	5,452	2,814	102	5,814	2,548	107
PY035G	2,366	876	281	1,741	580	131	2,190	504	188
PY050G	14,620	532	1,281	17,701	352	1,835	16,378	338	2,313
PY070G									
PY080G	7,935	24	1,337	5,126	7	1,724	10,368	18	2,897
PY090G	8,002	229	609	9,142	130	936	7,958	160	738
PY100G	17,680	920	578	17,275	756	540	18,138	772	503
PY110G	10,069	44	659	9,318	33	964	9,678	31	741
PY120G	3,688	69	649	2,796	54	636	3,196	53	672
PY130G	11,894	277	548	11,677	178	790	13,127	175	694
PY140G	2,995	252	156	2,902	191	231	3,078	184	163
Equivalized disposable income									
Population by household size									
1 household member	18,958	539	557	21,397	416	1,599	21,158	509	1,477
2 household members	22,716	1,956	433	22,874	1,284	567	23,790	1,334	649
3 household members	22,845	1,071	1,034	23,365	723	987	22,744	741	1,151
4 and more members	19,330	3,583	590	19,151	2,632	390	20,690	1,926	682
Population by age groups									
<25	18,829	2,456	472	18,807	1,753	346	19,806	1,414	539
25-34	21,163	610	469	22,776	471	530	23,160	459	490
35-44	21,336	1,303	598	22,477	934	973	22,608	740	605
45-54	23,200	1,214	692	23,728	754	985	23,632	766	725
55-64	23,071	1,036	704	24,609	630	1,406	27,133	587	2,083
65+	19,730	530	703	18,228	513	702	18,590	544	385
Population by sex									
Male	21,348	3,537	366	21,833	2,511	528	22,435	2,223	475
Female	20,335	3,612	322	20,743	2,544	377	21,581	2,287	538
Total	20,836	7,149	319	21,284	5,055	363	22,004	4,510	435

Table 2.9: Mean, number of observations, and standard errors for income components EU-SILC 2006, cross-sectional, R3 an R4.

	cross-sectional 2006			R4			R3		
	Mean	Number of observations	standard error	Mean	Number of observations	standard error	Mean	Number of observations	standard error
HY010	45,255	22,718	311	48,601	8,405	1,010	47,430	6,016	635
HY020	30,307	22,718	179	32,425	8,405	600	31,707	6,016	344
HY022	27,387	22,718	176	29,515	8,405	621	28,921	6,016	380
HY023	21,961	22,718	163	23,920	8,405	552	23,403	6,016	359
HY030G	2,340	17,145	15	2,395	6,419	28	2,423	4,570	33
HY040G									
HY050G	1,686	12,612	12	1,704	4,724	21	1,637	3,555	24
HY060G	9,206	1,837	1,078	7,694	730	464	7,194	453	563
HY070G	1,553	1,529	36	1,539	548	57	1,623	364	64
HY080G	3,374	1,329	238	3,315	476	350	2,518	362	251
HY090G	1,333	20,550	70	2,269	7,569	456	1,381	5,495	125
HY100G	7,413	16,103	100	7,544	6,031	158	7,793	4,365	215
HY110G	590	740	57	639	274	100	407	166	85
HY120G									
HY130G	3,779	2,413	169	3,273	854	230	4,143	633	354
HY140G	14,543	22,716	153	15,835	8,404	433	15,291	6,016	306
PY010G	26,340	11,723	231	27,677	4,458	594	26,755	3,114	403
PY021G	4,939	844	114	5,028	327	198	5,021	204	192
PY030G									
PY035G	2,016	2,665	141	2,389	1,040	337	2,207	708	418
PY050G	15,615	1,642	867	16,956	590	1,499	19,093	426	1,761
PY070G									
PY080G	7,516	76	1,254	6,881	26	1,217	10,182	16	4,642
PY090G	8,152	784	272	7,839	284	480	8,294	202	640
PY100G	16,632	3,504	274	17,363	1,095	656	16,558	883	526
PY110G	9,540	158	385	9,599	63	624	9,316	37	798
PY120G	4,074	244	407	5,090	77	1,133	3,595	71	728
PY130G	12,075	910	286	12,525	359	499	12,615	229	658
PY140G	2,388	867	72	2,288	308	108	2,399	229	169
Equivalized disposable income									
Population by household size									
1 household member	17,722	2,173	441	19,574	750	1,928	17,510	537	1,282
2 household members	21,696	6,360	226	22,540	2,364	520	22,126	1,544	420
3 household members	20,340	3,687	342	21,322	1,392	624	21,433	984	530
4 and more members	17,854	10,498	230	18,782	3,899	618	18,984	2,951	399
Population by sex									
Male	19,745	11,262	151	21,019	4,163	504	20,484	2,984	255
Female	18,982	11,456	114	19,813	4,242	303	19,662	3,032	228
Total	19,363	22,717	104	20,411	8,405	356	20,068	6,016	220

2.3   Non-sampling errors

2.3.1.   *Sampling frame and coverage errors*

As mentioned in paragraph 2.1.1, the sampling frame of addresses is constructed from the Population Register. First a complete list of addresses is made and then divided into 10 disjoint groups: A0, A1, A2 …, A9. Each of these subsets contains 10% of all the addresses in the Population Register. Subset A0 is used as an address sampling frame for the years 2000, 2010, 2020, …, subset A1 is used as an address sampling frame for the years 2001, 2011, and so on. With this kind of approach the sampling frames of ten subsequent years are disjoint and addresses that are contacted within one particular year will not be part of another address survey sample for the next nine years. This approach is in compliancy with the policy of Statistics Netherlands to reduce respondent burden in all surveys. Finally, additional information on the type of address and number of postal delivery points is added to the sampling frame using data from the Geographical Municipal Registration (in Dutch: Geografisch BasisRegister – GBR). The result is a set of disjoint sampling frames (one for each year) with address information and personal information of all individuals that are registered in a Dutch municipality.

Each year in September the sampling frames for the next year are constructed. The sampling frame of addresses is updated monthly for changes related to births, deaths, migration, new addresses, and vacancies. Also taken into account are changes in municipality boundaries and postal codes. At the date of sample drawing the entries of the sampling frame are therefore practically equal to those in the Population Register (GBA). As the fieldwork period starts six weeks later, coverage errors may occur: during the six weeks between drawing and application of the sample new addresses will be established and some addresses have become vacant or have been demolished.

Institutional addresses are removed after drawing the sample by comparing the sample addresses with entries in the register of institutional addresses. This register is updated once a year, so a small number of over-coverage errors are to be expected.

2.3.2   Measurement and processing errors

Measurement errors originate from four basic sources:
      (a) the questionnaire (effects of the design, content and wording);
      (b) the data collection method (effects of the modes of interviewing);
      (c) the interviewer (effects of the interviewer on the response to a question including errors of the interviewer);
      (d) the respondents (effects of the respondent on the interpretation of items).

Statistics Netherlands implemented a number of measures to reduce such errors.

- put in specialised expertise in developing questionnaires;
- routings in the questionnaires to provoke only the relevant questions for the respondent;
- cognitive laboratory experiments with focus groups and depth interviewing.
- there is an opportunity to make remarks in the questionnaire;
- evaluations of the questionnaire
- a stable automation system of data communication and production;
- monitoring system;
- each record contains interview accounts as well as interview data;
- extended interviewer instructions and regularly refreshing courses on basic skills and on EU-SILC;
- Interviewer manual;

Statistics Netherlands used the CATI–method for the EU-SILC interview. Two seperate questionnaires for the 65- and 65plus households (see chapter 3) were programmed in Blaise with several data entry and coding controls to reduce processing errors. Finally the EU-SILC files were transformed into Eurostats' standard format and tested using the checking programs developed by Eurostat.

2.3.3 Non-response errors

2.3.3.1 Achieved sample size

In 2005 a new sample was constructed and divided in four rotational groups. In table 2.10a it is shown that the four groups differ in size to compensate for panel attrition. The first group did only participate for one year (purely cross-sectional), the second for two years, the third for three years and the fourth for four years. Consequently the sample size for the first group (R1) was smaller than the sample size for the second group (R2), followed by the third (R3) and the fourth group (R4). The first group has been replaced by a new group R1' in EU-SILC 2006. Group R2' consists of new sample persons who were drawn from the Labour Force Study in 2007.

Table 2.10 a: Sample Size and accepted Interviews EU-SILC 2005

	Total	R1	R2	R3	R4
Persons 16 years and older	17,852	1,667	2,581	5,674	7,930
Number of sample persons	9,356	957	1,331	2,958	4,110
Number of accepted personal questionnaires	17,852	1,667	2,581	5,674	7,930
Accepted household interviews	9,356	957	1,331	2,958	4,110

Table 2.10b: Sample Size and accepted Interviews EU-SILC 2006

	Total	R1'	R2	R3	R4
Persons 16 years and older	17,392	4,395	2,082	4,522	6,393
Number of sample persons	8,986	2399	1,051	2,311	3,285
Number of accepted personal questionnaires	17,392	4,395	2,082	4,522	6,393
Accepted household interviews	8,986	2339	1,051	2,311	3,285

Table 2.10c: Sample Size and accepted Interviews EU-SILC 2007

	Total	R1'	R2'	R3	R4
Persons 16 years and older	19,623	3,555	6,979	3,736	5,353
Number of sample persons	10,219	1,876	3,731	1,909	2,703
Number of accepted personal questionnaires	19,623	3,555	6,979	3,736	5,353
Accepted household interviews	10,219	1,876	3,731	1,909	2,703

2.3.3.2 Unit non-response

Indicators of unit non-response are included in table 2.11. The overall household non response rate is 17%. This rate differs slightly between the four rotational groups.

Statistics Netherlands has focused on an increased use of register data instead of survey data in the production process of statistical information. Examples of administrative registrations are the Population Register (in Dutch: GBA), data on social security and tax data. The GBA is a fully decentralised, comprehensive and cohesive registration which contains information on age, sex, ethnicity, place of birth, place of residence, marital status, and etcetera for (registered) persons living in the Netherlands. This registration is available from 1995 onwards.

Most of the present administrative Registers are provided with a unique link key. This is the so-called social security and fiscal number (SoFi-number). This SoFi-number is a personal identifier for every (registered) Dutch inhabitant and for those living abroad who receive an income from activities in the Netherlands and consequently have to pay tax over their earnings to the Dutch fiscal authorities. A few SoFi-numbers may be registered with incorrect values in the data-files, in which case linkage with other files is doomed to fail. However, in general, the percentage of matches is close to 100 percent.

All social statistics data-files can be linked to the Population Register, which in practice means that all datafiles can be linked to each other via this register. However, surveys records do not have a SoFi-number. This is also true for the EU-SILC part in which data are collected by interviews. For those records an alternative link key must be used, which is often built up by combining a set of identifying variables (address, sex and date of birth). This sort of link key will in most cases be successful in distinguishing people. However, it is not a 100 percent unique combination of identifiers. When linking the Population Register to the records from EU-SILC with this alternative key – and tolerating a variation between sources in at most one of the variables sex, year of birth, month of birth or day of birth – it reveals that 99 percent of the EU-SILC-records can be linked to the Population Register. Via this link with the Population Register it is possible to obtain the information on income from the tax administration.

EU-SILC respondents that could not be linked to the PopulationRegister have been rejected from the database. This also accounts for their household members. This is acceptable because the number of persons which could not be linked is very low and the developing of imputation methods for these households is high. Consequently, there's no partial unit non-response with respect to income in the EU-SILC database.

This method implies a loss of efficiency of the survey and the non response bias is difficulty controllable. If the unlinked records belong to a selective subpopulation, then estimates based on the linked records may be biased, because they do not represent the total population. Analysis in the past has indicated that the young people, the 15–24 age group, show a lower linking rate in household sample surveys than other age groups. The explanation for this phenomenon is that they move more frequently and therefore they are often registered at the wrong address (e.g. students). However, in using a weighting model which includes age, any selectivity in the database has been solved accordingly.

Table 2.11: Indicators on Unit Non-response

	Total	R1'	R2'	R3	R4
Addresses successfully contacted	11,612	2,066	4,515	2,090	2,941
Valid addresses selected	12,373	2,225	4,762	2,224	3,162
RA address contact rate	0,94	0,93	0,95	0,94	0,93
Number of household interviews accepted	10,219	1,876	3,731	1,909	2,703
RH (proportion of completed household interviews accepted)	0.88	0,91	0,83	0,91	0,92
NRh (Household non-response rate) %	17,4%	15,7%	21,7%	14,2%	14,5%
Personal interviews completed	19,623	3,555	6,979	3,736	5,353
Number of eligible individuals	19,623	3,555	6,979	3,736	5,353
Rp 1)	1	1	1	1	1
Individual non response rate (%)	0	0	0	0	0
Overall individual non-response (%)	17,4%	15,7%	21,7%	14,2%	14,5%

1) proportion of complete interviews within the households accepted for the database

Table 2.12: Household response rates: Comparison of results codes between wave 2 (2006) and wave 3 (2007)

	Sample outcome in 2007 (wave 3)								
	DB135=1	DB135=2	DB120=22	DB130=23	DB135=24	DB130=21	NC	DB120=23	Total
Sample outcome 2006									
R1'									
DB135=1	1876	4	1	19	50	83	305	1	2339
DB135=2		33		1			21		55
Total	**1876**	**37**	**1**	**20**	**50**	**83**	**326**	**1**	**2394**
R3									
DB135=1	1909	6	2	15	54	63	259	3	2311
DB135=2		13					2		15
DB120=22							2		2
DB130=22									0
DB130=23							27		27
DB130=24							231		231
Total	**1909**	**19**	**2**	**15**	**54**	**63**	**521**	**3**	**2586**
R4									
DB135=1	2703	9	3	27	54	84	402	3	3285
DB135=2		7					1		8
DB120=22							2		2
DB130=22									0
DB130=23							27		27
DB130=24							231		231
Total	**2703**	**16**	**3**	**27**	**54**	**84**	**663**	**3**	**3553**
New HH 2007 (R2')									
DB110=8									
DB110=9	3731	95	247	123	110	456		8	4770
	A	B	C	E	F	G	I	K	T
Total	**10219**	**167**	**253**	**185**	**268**	**686**	**1510**	**15**	**13303**

Table 2.13: Wave response rates and achieved sample size ratio by rotational group

	R1'	R2'	R3	R4
Wave response rate (%) (A/T-K)	78%	78%	74%	76%
Refusal rate (%) (G/T-K)	3%	10%	2%	2%
No contacted and others (%)	17%	18%	23%	21%
Longitudinal follow-up rate (%)	81%		77%	79%
Achieved sample size ratio (%)	80%		83%	82%

2.3.3.3 Distribution of households by household status (DB110), by record contact at address (DB120), by household questionnaire result (DB130) and by household interview acceptance (DB135)

Table 2.14: Distribution of DB120, DB130 and DB135

	Total	R1	R2	R3	R4
DB120 –Contact at address					
Address contacted	11,612	2,066	4,515	2,090	2,941
Address unable to access	761	159	247	134	221
Address does not exist	144	41	8	37	58
Total	12,517	2,266	4,770	2,261	3,220
DB130- Household questionnaire result					
Household questionnaire completed	10,463	1,913	3,826	1,951	2,773
Refusal to cooperate	691	83	456	67	85
Entire household temporary away					
Household unable to respond	188	20	123	16	29
Other reasons	270	50	110	56	54
Total	11,612	2,066	4,515	2,090	2,941
DB135- Household interview acceptance					
Interview accepted for database	10,219	1,876	3,731	1,909	2,703
Interview rejected	244	37	95	42	70

2.3.3.4 Distribution of persons by membership status (RB110)

Table 2.15 and 2.16 show the distribution of persons by memberschip status for each wave of the EU-SILC longitudinal component.

Table: 2.15 Distribution of persons by membership status (RB110)

	Current household members				**No current household members**		
Rotational group	RB110=1	RB110=2	RB110=3	RB110=4	RB120=2 to 4	RB110=6	RB110=7
R1	4,441	0	38	60	8	4	0
R3	4,995	0	33	51	4	2	0
R4	7,066	0	59	69	10	1	0

Table: 2.16 Distribution of persons moving out by variable RB120

	RB110=5				
	RB120=1		RB120=2	RB120=3	RB120=4
Rotational group	Person is a current household member of this wave	Person is not a current household member			
R2	0	83	0	1	7
R3	0	92	0	0	4
R4	0	115	0	3	7

2.3.3.5 Item non-response

As income data are based on register information most income variables do not consist of item non-response. Only the inter-household transfers (paid and received) and the income from rental of a property or land are partly derived from the EU-SILC questionnaire.

Table: 2.17 Item non-response household income compontents

	Persons (16+) having received an amount		With full information		With non or partial information	
	count	%	count	%	count	%
HY010 Total household gross income	10,219	100	10,047	98	172	2
HY020 Total disposable household income	10,219	100	9,890	98	329	3
HY022 HY020 before transfers (except pensions)	10,219	100	9,890	98	329	3
HY023 HY020 before transfers including pensions	10,219	100	9,890	98	329	3
HY030G Imputed rent	7,018	69	7,018	69	-	-
HY040G Income from rental of a property or land	347	3	250	2	97	1
HY050G Family/Children related allowances	3,620	35	3,620	36	-	-
HY060G Social exclusion not elsewhere classified	679	7	679	7	-	-
HY070G Housing allowances	875	9	875	10	-	-
HY080G Regular inter-household cash tansfer received	643	6	550	5	93	1
HY090G Interest, dividends, profit from capital gain	8,943	88	8,943	88	-	-
HY100G Interest repayments on mortgage	6,414	63	6,414	62	-	-
HY110G Income received by people under 16	177	2	177	2	-	-
HY130G Regular inter-household cash transfer paid	1,252	12	1,084	11	168	1
HY140G Tax on income and social contibutions	10,219	100	10,219	100	-	-

Table: 2.18 Item non-response personal income compontents

	Persons (16+) having received an amount		With full information		With non or partial information	
	count	%	count	%	count	%
PY010G Employee cash or near cash income	13,267	68	13,26ʹ	68	-	-
PY020G Non-Cash employee income	-	-	-	-	-	-
PY021G Company car	1057	5	1057	5	-	-
PY030G Employer's social insurance contribution	14,530	74	14,530	74		
PY035G Contributions to individual private pension plans	2,993	15	2,993	15	-	-
PY050G Cash benefits/losses from self-employment	1,878	10	1,878	10	-	-
PY080G Pension from individual private plans	82	0	82	0	-	-
PY090G Unemployment benefits	849	4	849	4	-	-
PY100G Old-age benefits	3,942	20	3,942	20	-	-
PY110G Survivor' benefits	169	1	169	1	-	-
PY120G Sickness benefits	299	2	299	2	-	-
PY130G Disability benefits	964	5	964	5	-	-
PY140G Education-related allowances	994	5	994	5	-	-

2.4 Mode of data collection

The response part of Labour Force Survey has been used as the sampling frame for EU-SILC. The income target variables have been derived from Registers. As a result, a substantial reduction of the questionnaire has been achieved. This enabled Statistics Netherlands to use Computer Assisted Telephone Interview (CATI) as interview mode.

Table 2.19: Distribution of RB245, RB250 and RB260 by rotational group

	Total	R1	R2	R3	R4
RB245-Respondent Status					
Household member aged 16 and over	19,623	3,555	6,979	3,736	5,353
- selected respondent	10,219	1,876	3,731	1,909	2,703
-not selected respondent	9,404	1,679	3,248	1,827	2,650
RB250- data Status					
Information completed only from registers (11)	42	6	19	5	12
Information completed from both interview and registers (13)	19,581	3,549	6,960	3,731	5,341
Total	19,623	3,555	6,979	3,736	5,353
RB260 – Type of interview (selected respondent)					
CATI (3)	9,296	1,688	3,175	1,798	2,635
Proxy interview (5)	923	188	556	111	68

One point of concern is the number of proxy-interviews with respect to the detailed variables (selected respondent). In 2005, this proxy rate was quite high (27%). For the 2006 and 2007 operation, specific measures have been taken to substantially reduce the number of proxy-interviews, such as interview-training and specific instructions how to approach the selected person in the household. This resulted in a 10% proxy rate in the 2007 operation.

2.5 Imputation procedure

As income data are based on register information – except for the some questions concerning the inter-household transfers (paid and received) and the income from rental of a property or land– the income variables do not consist of partial unit non-reponse or item non-response. If the household respondent refused to answer or did not know the amount of the inter-household transfers or the income from rental mean value imputation was used..

2.6 Imputed rent

For estimating the equivalent market rents in EU-SILC, the parameter estimates have been calculated based on another survey, the Survey on Household Expenditures. A regression model was applied on the estimates of market rents of owner-occupiers by real estate agents. This model includes the market value of the dwelling, region, level of urbanisation and household type. The total market rent is calculated by the National Account Statistics. Next the distribution of the market rent over the households is based on the results of the regression model.

2.7 Company car

The estimation of the value of 'company car' has been specified by the amount of benefit for which the recipient is assessed for tax purposes. The calculation of the employee income component 'company car' follows the rules of the tax authorities. As a general rule one has to add 22% of the value of the car to the income. Important are the original price of the company car and the intensity (kilometres) of private use.

3.   Comparability

This chapter reports on the differences between Eurostat definitions and the definitions Statistics Netherlands applied in EU-SILC 2007. It also reports in the impact of these differences on the comparability.

3.1 Basic concepts and definitions

(a) Reference population

The reference population of EU-SILC is all private households and their current members residing in the Netherlands at the time of data collection. The West Frisian Islands with the exception of Texel were excluded from the target population. This is also true for persons living in collective households and in institutions.

(b) Private household

No difference to the common definition.

(c) Household membership

There are some minor differences in the treatment of special categories like lodgers or people temporarily away (e.g. students). These people are only included as a household member if they are registered at the households' address. According to the EU-definitions resident boarders, lodgers and tenants should be included if they share expenses, have no private address elsewhere or their actual/intended duration of stay must be six months or more. Statistics Netherlands does not apply this limit of six months.

(d) Income reference period(s)

The income data of EU-SILC 2007 refer to the calendar year 2006. The income data were mainly collected from registers.

(e) The period for taxes on income and social insurance contributions

Taxes on income and social contributions are based on the 'income received' in the income reference year (accrual basis) and do not refer to the amounts actually paid in the income reference year.

(f) The reference period for taxes on wealth

There are no taxes on wealth in the Netherlands.

(g) The lag between the income reference period and current variables

The EU-SILC fieldwork period started in June 2007 and ended at 5 October 2007. Therefore the lag is at minimum 5 months and at maximum 10 months.

(h) The total duration of the data collection of the sample

The total duration of the data collection was approximately 5 months.

(i) Basic information on activity status during the income reference period

The monthly activity status during the income reference period is mainly based on register data on the main income source. The distinction between full-time and part-time work is based on the survey part of EU-SILC and the LFS.

3.2 Components of income

There are some differences in the definition of total gross income and disposable income based on the national definition and the SILC definition.

According to the Commission Regulation:

- *Interest paid on consumer debts is not considered as part of income definition in EU-SILC. In Statistics Netherlands' statistics on disposable household income interest payments on consumer debts are deducted to derive the disposable income.*

- *Contributions to individual private pension plans (PY035) are classified under items which are not to be considered as income. In Statistics Netherlands' statistics on disposable household income, regular contributions to and benefits from private insurance schemes covering the risk of income loss are treated similarly as regular contributions to and benefits from (mandatory) social insurance and pension insurance schemes. This implies that contributions are deducted and benefits are added to derive disposable income.*

3.2.1 Differences in definitions of the income target variables

Income variables with no differences from standard EU-SILC definitions are not mentioned.

Total household gross income and disposable income (HY010 and HY020);
The total household income (gross/disposable) has been computed without taking account the interest paid on mortgage and imputed rent. Subsequently the payable tax on income and social insurance contributions have been corrected to get the fictitious amounts that should have been paid if these components were not received/paid.

Total disposable household income before social transfers except old-age and survivor's benefits (HY022);
In order to calculate HY022 Statistics Netherlands calculated the taxable income without the income components:

PY090G + PY120G + PY130G + PY140G + HY050G + HY060G + HY070G.

Subsequently the payable tax on income and social insurance contributions have been corrected. The reason for this adaptation – the exclusion of these income components – is to calculate the fictitious amounts that should have been paid if such social transfers were not received.

Total disposable household income before social transfers including old-age and survivor's benefits (HY023);

Like HY022, but the income components PY100G and PY110G were also excluded.

Family/children-related allowances (HY050);
Maternity and parental leave benefits are not included in HY050 as those benefits cannot be separated from wages. These components are included in variable PY010.

Regular inter-household cash transfers received - (HY080);
Alimonies received from former spouse are available in the Tax Administration. Other transfers like payments received from parents living in a separate household (e.g. students) and child alimony are collected in the EU-SILC- interview.

Regular taxes on wealth (HY120);
There are no taxes on wealth in the Netherlands.

Regular inter-household cash transfers paid (HY130);
Maintenance allowances to former spouse were collected form the Tax Administration. Other transfers like child alimony are collected in the EU-SILC interview.

Total tax on income and social contribution (HY140);
When calculating disposable income some components were excluded (interest repayments on mortgage, imputed rent). Therefore, this variable refers to the fictitious amounts that have to be paid as if there were no (tax deductible) interest repayments on mortgage.

Gross employee cash income (PY010G);
Allowances for transport to or from work are not included in PY010. Severance and termination payments to compensate employees and redundancy payments (including lump-sum payments) are also included in PY010G. They are not included in PY090G (unemployment benefits).

Unemployment benefits (PY090G);
PY090 includes the vocational training allowance, i.e. payment by social security funds or public agencies to targeted groups of persons in the labour force who take part in training schemes intended to develop their potential for employment. Statistics Netherlands has no information available on benefit (in-kind) related to vocational training.

3.2.2 The source or procedure used for the collection of income variables

The variables concerning income, wealth and taxes were almost entirely collected from registers. The most important source is the Tax Administration. Data on rent subsidies are obtained from the Ministry of Housing. Student grants were obtained from the student loan company. Some components were imputed on the basis of information given in the questionnaire. For example, child benefits were calculated on the basis of the information about the number and age of children in the household.

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

All income data derived from registers are recorded gross at component level. All income data are collected at the individual level (i.e. the person registered as the receiver of the income). This also concerns typically 'household' related incomes such as housing benefits and social assistance.

3.2.4 The method used for obtaining the income target variables in the required form (i.e. gross values).

Not applicable

3.3 Tracing rules

For the 2007 operation Statistics Netherlands followed the standard EU-SILC tracing rules.

4.   Coherence

Coherence refers to the comparison of target variables with external sources.

4.1 Description of data sources

The Income Panel Survey (IPS)

The main aim of IPS is to provide a detailed description of the composition and distribution of income of persons and households. The IPS-panel started in 1989. A simple random sample of individuals of 0.61% of the population was selected. This is the nuclear sample. These individuals are followed in the panel. Each year 0.61% of all new-born children and immigrants is added to the sample to counterbalance the effect of attrition. The complete sample consists of everyone belonging to the households of the individuals who belong to the nuclear sample. This extension to all household members results in a total sample of about 250.000 persons. However, only those persons belonging to the nuclear sample are followed in the panel. Other household members will only be followed when they remain with the reference person. The reference population is the population at the end of the year. The IPS is based mainly on information from the tax department and the PR. The IPS contains information on income of the person and of the other members of the household, a limited set of personal characteristics (age, sex and marital status) and some household characteristics (household composition). The household income is derived by aggregating the incomes of all the members of the household.

4.2 Comparison of income target variables with IPS

The result of the comparison between IPS 2006 (preliminary) and the incomes reported from EU-SILC 2007 is shown in Table 4.1. Both sources are compared using the national definition of income. Equivalised income has been computed using the modified OECD-equivalence scale.

Table 4.1 : Comparison EU-SILC 2007 and IPS 2006

		EU-SILC 2007	IPS 2006 [1]
		x 1000 euro	x 1000 euro
Mean disposable income [2]		35.8	35.7
Mean equivalised income		19.6	19.5
Median equivalised income		17.3	17.5
At-risk-of-poverty rate (60%)	*Total*	10.6	10.7
	Male	10.2	10.4
	Female	11	10.9
Dispersion around the threshold (%)	*(a) 40% of median*	3.3	3.4
	(b) 50% of median	5.8	6.0
	(c)70% of median	18.4	18.2

1) Source: CBS (Income Panel Survey, preliminary)
2) personal level

4.3 Comparison of number op persons and households who receive income from each 'component'

Table 4.2 and table 4.3 show the comparison between EU-SILC and IPS on income-component level. The differences on both personal and household level are quite small, with the exception of the inter-household transfers (HY080G and HY130G) due to extra collected information in the EU-SILC interview (see chapter 3.

Table 4.2 Personal income components, IPS 2006-EU-SILC 2007

	count	sum	median	mean
EU-SILC 2007	*x 1000*	*mln euro*	*x 1000 euro*	
PY010G Employee cash or near cash income	8,016	216,320	23,8	27,0
PY020G Non-Cash employee income	558	2,873	4,7	5,2
PY030G Employer's social insurance contribution	9,141	49,548	4,1	5,4
PY035G Contributions to individual private pension plans	1,623	3,676	1,0	2,3
PY050G Cash benefits or losses from self-employment	1,269	20,467	5,7	16,1
PY080G Pension from individual private plans	60	626	7,3	10,5
PY090G Unemployment benefits	560	4, 469	5,1	8,0
PY100G Old-age benefits	3,052	52,151	13,2	17,1
PY110G Survivor' benefits	108	1,072	12,8	9,9
PY120G Sickness benefits	218	642	1,0	2,9
PY130G Disability benefits	666	7,893	10,9	11,9
PY140G Education-related allowances	801	2,374	3,0	3,0
IPS 2006 [1]				
PY010G Employee cash or near cash income	7,974	214,121	23,3	26,9
PY020G Non-Cash employee income	585	3,320	5,0	5,7
PY030G Employer's social insurance contribution	9,080	68,943	4,8	7,6
PY035G Contributions to individual private pension plans	1,410	3,797	1,0	2,7
PY050G Cash benefits or losses from self-employment	1,220	24,860	9,0	20,4
PY080G Pension from individual private plans	77	951	7,4	12,4
PY090G Unemployment benefits	555	4,348	5,0	7,8
PY100G Old-age benefits	3,024	52,565	13,0	17,4
PY110G Survivor' benefits	122	1,187	12,7	9,7
PY120G Sickness benefits	266	1,125	1,4	4,2
PY130G Disability benefits	612	7,051	11,5	11,5
PY140G Education-related allowances	792	2,278	3,0	2,9

1) Source: CBS (Income Panel Survey, preliminary)

Table 4.3 Household income components, IPS 2005-EU-SILC 2006

	Count	sum	median	mean
EU-SILC 2007	*x 1000*	*mln euro*	*x 1000 euro*	
HY030G Imputed rent	3,847	9,546	2,2	2,5
HY040G Income from rental of a property or land	230	1,839	4,5	8,2
HY050G Family/Children related allowances	1,917	3,283	1,6	1,7
HY060G Social exclusion not elsewhere classified	756	5,926	8,4	7,8
HY070G Housing allowances	1,092	1,963	1,9	1,8
HY080G Regular inter-household cash transfer received	596	2,406	2,9	4,0
HY090G Interest, dividends, profit from capital gain	5,834	14,481	0,3	2,5
HY100G Interest repayments on mortgage	3,467	25,991	6,2	7,5
HY110G Income received by people under 16	82	111	0,3	1,4
HY120G Regular taxes on wealth	-	-	-	-
HY130G Regular inter-household cash transfer paid	774	3,094	2,5	4,0
IPS 2006 [1]				
HY030G Imputed rent	3,843	9,113	2,1	2,4
HY040G Income from rental of a property or land	196	1,189	1,9	6,1
HY050G Family/Children related allowances	1,938	3,180	1,5	1,6
HY060G Social exclusion not elsewhere classified	747	5,635	6,8	7,5
HY070G Housing allowances	950	1,732	1,9	1,8
HY080G Regular inter-household cash transfer received	61	619	5,7	10,1
HY090G Interest, dividends, profit from capital gain	5,276	8,671	0,3	1,6
HY100G Interest repayments on mortgage	3,435	25,876	6,3	7,5
HY110G Income received by people under 16	89	60	0,3	0,7
HY120G Regular taxes on wealth	-	-	-	-
HY130G Regular inter-household cash transfer paid	91	640	3,8	7,0

1) Source: CBS (Income Panel Survey, preliminary)

4.4 Comparison with EU-SILC 2005 and 2006

Table 4.4 and table 4.5 show the comparison between EU-SILC 2007 and previous operations on income-component level.

Table 4.4 Personal income components, EU-SILC 2005- 2007

	count	sum	median	mean
EU-SILC 2005	*x 1000*	*mln euro*	*x 1000 euro*	
PY010G Employee cash or near cash income	7,859	204,636	23,7	26,0
PY020G Non-Cash employee income	519	2,492	4,5	4,8
PY035G Contributions to individual private pension plans	1,732	4,119	0,9	2,4
PY050G Cash benefits or losses from self-employment	1,235	21,363	6,4	17,3
PY080G Pension from individual private plans	62	1 263	5,7	20,3
PY090G Unemployment benefits	611	4 934	5,7	8,1
PY100G Old-age benefits	2,943	49,294	12,6	16,7
PY110G Survivor' benefits	111	1 058	12,5	9,5
PY120G Sickness benefits	219	856	1,7	3,9
PY130G Disability benefits	693	8 211	11,4	11,9
PY140G Education-related allowances	711	1 572	2,1	2,2
EU-SILC 2006				
PY010G Employee cash or near cash income	7,916	211,092	23,5	26,7
PY020G Non-Cash employee income	512	2,522	4,6	4,9
PY035G Contributions to individual private pension plans	1,685	3,440	0,9	2,0
PY050G Cash benefits or losses from self-employment	1,259	18,479	5,4	14,7
PY080G Pension from individual private plans	64	474	3,7	7,4
PY090G Unemployment benefits	619	5, 029	5,9	8,1
PY100G Old-age benefits	3,001	49,855	12,9	16,6
PY110G Survivor' benefits	107	1 031	12,3	9,6
PY120G Sickness benefits	211	855	1,0	4,1
PY130G Disability benefits	712	8,531	11,5	12,0
PY140G Education-related allowances	775	1,844	2,5	2,4
EU-SILC 2007				
PY010G Employee cash or near cash income	8,016	216,320	23,8	27,0
PY020G Non-Cash employee income	558	2,873	4,7	5,2
PY030G Employer's social insurance contribution [1]	9,141	49,548	4,1	5,4
PY035G Contributions to individual private pension plans	1,623	3,676	1,0	2,3
PY050G Cash benefits or losses from self-employment	1,269	20,467	5,7	16,1
PY080G Pension from individual private plans	60	626	7,3	10,5
PY090G Unemployment benefits	560	4, 469	5,1	8,0
PY100G Old-age benefits	3,052	52,151	13,2	17,1
PY110G Survivor' benefits	108	1, 072	12,8	9,9
PY120G Sickness benefits	218	642	1,0	2,9
PY130G Disability benefits	666	7,893	10,9	11,9
PY140G Education-related allowances	801	2,374	3,0	3,0

1) mandatory from 2007 onward

Table 4.5 Household income components, EU-SILC 2005-2007

	count	sum	median	mean
EU-SILC 2005	*x 1000*	*mln euro*	*x 1000 euro*	
HY030G Imputed rent	3,641	8,831	2,1	2,4
HY040G Income from rental of a property or land	3	17	3,6	5,8
HY050G Family/Children related allowances	1,952	3,261	1,5	1,7
HY060G Social exclusion not elsewhere classified	725	6,199	8,9	8,6
HY070G Housing allowances	1,157	1,814	1,6	1,6
HY080G Regular inter-household cash transfer received	565	2,132	2,6	3,8
HY090G Interest, dividends, profit from capital gain	5,815	5,084	0,3	0,9
HY100G Interest repayments on mortgage	3,169	23,065	6,1	7,3
HY110G Income received by people under 16	88	139	0,4	1,6
HY120G Regular taxes on wealth	-	-	-	-
HY130G Regular inter-household cash transfer paid	791	3,015	2,4	3,8
HY140G Tax on income and social contibutions	7,090	99,579	10.4	14.0
EU-SILC 2006				
HY030G Imputed rent	3,796	8,905	2,1	2,3
HY040G Income from rental of a property or land	-	-	-	-
HY050G Family/Children related allowances	1,914	3,227	1,6	1,7
HY060G Social exclusion not elsewhere classified	754	6,940	9,0	9,2
HY070G Housing allowances	1,152	1,788	1,6	1,6
HY080G Regular inter-household cash transfer received	610	2,057	2,2	3,4
HY090G Interest, dividends, profit from capital gain	5,868	10,066	0,3	1,7
HY100G Interest repayments on mortgage	3,389	25,122	6,1	7,4
HY110G Income received by people under 16	99	59	0,4	0,6
HY120G Regular taxes on wealth	-	-	-	-
HY130G Regular inter-household cash transfer paid	772	2,916	2,5	3,8
HY140G Tax on income and social contibutions	7,145	103,906	10,3	14,5
EU-SILC 2007				
HY030G Imputed rent	3,847	9,546	2,2	2,5
HY040G [1] Income from rental of a property or land	230	1,839	4,5	8,2
HY050G Family/Children related allowances	1,917	3,283	1,6	1,7
HY060G Social exclusion not elsewhere classified	756	5,926	8,4	7,8
HY070G Housing allowances	1,092	1,963	1,9	1,8
HY080G Regular inter-household cash transfer received	596	2,406	2,9	4,0
HY090G Interest, dividends, profit from capital gain	5,834	14,481	0,3	2,5
HY100G Interest repayments on mortgage	3,467	25,991	6,2	7,5
HY110G Income received by people under 16	82	111	0,3	1,4
HY120G Regular taxes on wealth	-	-	-	-
HY130G Regular inter-household cash transfer paid	774	3,094	2,5	4,0
HY140G Tax on income and social contibutions	7,191	102,663	10,0	14,3

1) From EU-SILC 2007 onwards several questions about the income from rental of a property or land have been added tot the questionnaire