NATIONAL STATISTICAL
SERVICE OF GREECE

DIVISION OF POPULATION AND
LABOUR MARKET STATISTICS

UNIT OF HOUSEHOLDS' SURVEYS

STATISTICS ON INCOME AND LIVING CONDITION*
(EU-SILC 2004)

## INTERMEDIATE QUALITY REPORT

PIRAEUS, DECEMBER 2005

## Contents

## INTRODUCTION

## 1. COMMON CROSS-SECTIONAL EUROPEAN UNION INDICATORS

### 1.1. Common cross-sectional EU indicators based on the cross-sectional component of EU-SILC

### 1.2. Other indicators

1.2.1. Mean equivalised income

### 1.2.2. The unadjusted gender pay gap

### 1.3. Social exclusion indicators

1.3.1. Non monetary household deprivation indicators, including problems in making ends meet, extent of debt and enforced lack of basic necessities

### 1.3.1.1. Fullfilment of basic needs

1.3.1.2. Quality of life
1.3.1.3. Ability to make ends meet
1.3.1.4. Lowest monthly income to make ends meet
1.3.1.5. Financial burden of the total household cost
1.3.1.6. Financial burden of the repayment of debts from hire purchases or loans

### 1.3.2. Rhysical and social enviroment

1.3.3. Housing and non housing related arrears
1.3.4. Housing conditions
1.3.5. Amenities in the dwelling

### 1.4. Other social indicators

1.4.1. General health for household members aged 16 and over
1.4.2. Unmet need for medical examination or treatment for household members aged 16 and over
1.4.3. Highest ISCED level attained for household members aged 16 and over

## 2. ACCURACY

### 2.1. Sample design

2.1.1. Type of sample design
2.1.2. Sample units
2.1.3. Stratification and substratification criteria
2.1.4. Sample size and allocation criteria
2.1.5. Sample selection schemes
2.1.6. Sample distribution over time

### 2.1.7. Renewal of the sample: rotational groups

### 2.1.8. Weightings

2.1.8.1. Design factor
2.1.8.2. Non-response adjustments
2.1.8.3. Adjustment to external data (level, variables used and sources)
2.1.8.4. Final cross-sectional weight

### 2.1.9. Substitutions

### 2.2. Sampling errors

### 2.2.1. Estimation of survey characteristics

2.2.2. Standard error and effective sample size
2.3. Non-Sampling errors

### 2.3.1. Sampling frame and coverage errors

### 2.3.2. Measurement and processing errors

2.3.2.1. Measurement errors
2.3.2.2. Proccessing errors
2.3.3. Non-response errors
2.3.3.1. Achieved sample size
2.3.3.2. Unit non-response
2.3.3.3. Distribution of households
2.3.3.4. Distribution of substituted units
2.3.3.5. Item non-response
2.3.3.6. Total item non-response
2.4. Mode of data collection
2.5. Interview duration

## 3. COMPARABILITY

3.1. Basic concepts and definitions
3.2. Components of income
3.2.1. Income definitions

### 3.2.2. Other definitions

3.2.3. Variables not being collected but imputed
3.2.4. The source of procedure used for the collection of income variables
3.2.5. The form in which income variables at component level have been obtained
3.2.6. The method used for obtaining income target variables in the required form

## 4. COHERENCE

4.1. General comments
4.2. Comparison of structural indicators from EU-SILC 2004 and HBS 2004.
4.3. Comparison of income target variables and number of persons who receive income from each "income component', with external sources.
4.4. Comparison of other quality target variables.
5. CONCLUSION

## References

Annex 1 ( The questionnaires of the survey)

## INTRODUCTION

With the Amsterdam Treaty the program of social action in all member states for the years 1998-2000 was defined as well as the legal frame ruling the production of Social Statistics. The fields of poverty and social exclusion were of high priority in the political agenda of the European Council in Lisbone, in March 2000 as well as in the proposal of Commission for a communal program for encouraging cooperation among the member states against social exclusion.

During the European Council of Lisbon (March 2000) several requests were submitted concerning the quality improvement of statistical data and among other things were discussed the effacement of absolute poverty, the cooperation program among member states against social exclusion as well as the constitution of of structural indicators, such as indicators of unequal income distribution, poverty percentages before and after social transfers, intergenerational poverty, etc.

In December 2000, at the European Council that took place in Nice, France, the leaders of all member states confirmed the decision of Lisbon, that the battle against poverty and social exclusion is won using open methods of co-ordination and co-operation. Basic elements of this rapprochement are the determination of commonly accepted targets for the European Union and the elaboration of proper national action plans for the achievement of these targets, as well as the regular report and recording of the progress being made.

The Greek Survey on Income and Living Conditions is part of the European Statistical Program and has replaced since 2003 the European Community Household Survey.

Basic aim of the survey is the study, both at European and national level of households' living conditions in relation to their income. The survey will be the reference for comparative statistics on income distribution and social exclusion in the European Union.

With the survey examined are specific socio-economic magnitudes affecting population's living conditions. With collected information our country calculates the structural
indicators for social cohesion and produces systematic statistics on income inequalities, inequalities on households' living conditions, poverty and social exclusion.

More specifically from the survey calculated are 12 indicators, out of the 18 social cohesion indicators of Laeken, concerning poverty and social inequality. These indicators, among other things, contribute in the configuration and practice of social politics in our country.

For the pre-mentioned reasons information is gathered, for the households as well as for their members, concerning:

- Income from any source (work, property, social benefits, etc.)
- Occupation
- Living conditions (dwelling's quality, amenities, etc.)
- Educational level
- Health status for all members of the household

According to the methodology for measuring poverty, the poverty line is calculated with its relative concept and it is defined at $60 \%$ of the median total equivalized disposable income of the household, using modified OECD equivalised scale.

As total equivalized disposable income of the household is considered total net income (that is income after deducting taxes and social contributions) received from all household members.

More specifically the income componets included in the survey are:

- Income from work
- Income from property
- Social transfers and pensions
- Monetary transfers from other households and
- Imputed income from the use of company car.

Income componets, such as imputed rent from ownership-occupancy, indirect social transfers, income in kind and loan interest are possible to influence significantly the results and will be included in the survey from the year 2007, onwards.

The survey is being conducted upon the decision of the Ministry of Economy and Finance, and according to the contract having been signed among Commission and the National Statistical Service of Greece, in the framework of the under voting Regulation (EC) No 1177/2003 of the European Parliament and of the Council concerning Community Statistics on Income and Living Conditions (EU-SILC).

The survey consists of two components the cross-sectional and the longitudinal. The first one referring to a specific time period, while the second to the changes occuring in three or four years time.

This document provides common cross-sectional EU indicators based on the crosssectional component of EU-SILC, a description of the accuracy, precision, the comparability and the coherence of the Greek SILC 2004-survey data.

It is structured following the guidelines in the commission regulation (EC) no. $28 / 09.01 .2004$. The report is divided in three chapters:

1. Common Cross-sectional European Union Indicators
2. Accuracy
3. Comparability
4. Coherence
5. Conclusion

## References

The Questionnaires (in English) are annexed to this report (see annex 1).

## 1. COMMON CROSS-SECTIONAL EUROPEAN UNION INDICATORS

### 1.1 Common cross-sectional EU indicators based on the cross-sectional component of EU-SILC

## 1. Risk-of-poverty threshold (illustrative values)

One person household: 5.300,18 Euro
2. Risk-of-poverty threshold (illustrative values)

Household with 2 adults and 2 dependent children: 11.130,37 Euro

3a. Risk-of-poverty rate by age and gender (after social transfers)
Below At Risk Poverty Threshhold (ARPT)

| Age | Total | Female | Male |
| :---: | :---: | :---: | :---: |
| Total | 20,0 | 21,1 | 18,9 |
| $0-15$ | 19,7 | 19,4 | 20,0 |
| $0-64$ | 18,2 | 18,9 | 17,6 |
| $16+$ | 20,1 | 21,5 | 18,7 |
| $16-64$ | 17,9 | 18,8 | 17,0 |
| $16-24$ | 23,5 | 24,3 | 22,6 |
| $25-49$ | 15,8 | 16,9 | 14,7 |
| $50-64$ | 18,8 | 19,1 | 18,4 |
| $65+$ | 28,2 | 30,4 | 25,6 |



Above ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 80,0 | 78,9 | 81,1 |
| $0-15$ | 80,3 | 80,6 | 80,0 |
| $0-64$ | 81,8 | 81,1 | 82,4 |
| $16+$ | 79,9 | 78,5 | 81,3 |
| $16-64$ | 82,1 | 81,2 | 83,0 |
| $16-24$ | 76,5 | 75,7 | 77,4 |
| $25-49$ | 84,2 | 83,1 | 85,3 |
| $50-64$ | 71,8 | 80,9 | 81,6 |
| $65+$ | 69,6 | 74,4 |  |

3b. Risk-of-poverty rate by age and gender

## Total

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 16.805 | 8.673 | 8.132 |
| $0-15$ | 2.762 | 1.381 | 1.381 |
| $0-64$ | 13.540 | 6.867 | 6.673 |
| $16+$ | 14.043 | 7.292 | 6.751 |
| $16-64$ | 10.778 | 5.486 | 5.292 |
| $16-24$ | 1.895 | 972 | 923 |
| $25-49$ | 5.921 | 3.033 | 2.888 |
| $50-64$ | 2.962 | 1.481 | 1.481 |
| $65+$ | 3.265 | 1.806 | 1.459 |

Below ARPT

| AGE | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 3.714 | 1.994 | 1.720 |
| $0-15$ | 648 | 319 | 329 |
| $0-64$ | 2.759 | 1.430 | 1.329 |
| $16+$ | 3.066 | 1.675 | 1.391 |
| $16-64$ | 2.111 | 1.111 | 1.000 |
| $16-24$ | 492 | 261 | 231 |
| $25-49$ | 1.027 | 554 | 473 |
| $50-64$ | 952 | 296 | 296 |
| $65+$ |  | 564 | 391 |

Above ARPT

| AGE | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 13.091 | 6.679 | 6.412 |
| $0-15$ | 2.114 | 1.062 | 1.052 |
| $0-64$ | 10.781 | 5.437 | 5.344 |
| $16+$ | 10.977 | 5.617 | 5.360 |
| $16-64$ | 8.667 | 4.375 | 4.292 |
| $16-24$ | 1.403 | 711 | 692 |
| $25-49$ | 4.894 | 2.479 | 2.415 |
| $50-64$ | 2.370 | 1.185 | 1.185 |
| $65+$ | 2.310 | 1.242 | 1.068 |

3c. Risk-of-poverty rate by age and gender
Distribution of total population by gender

| Total | Female | Male |
| :--- | :--- | :--- |
| 100,00 | 51,0 | 49,0 |

3d. Risk-of-poverty rate by age and gender
Distribution of total population by age and gender

|  | $\mathbf{0 - 1 5}$ | $\mathbf{0 - 6 4}$ | $\mathbf{1 6 +}$ | $\mathbf{1 6 - 6 4}$ | $\mathbf{1 6 - 2 4}$ | $\mathbf{2 5 - 4 9}$ | $\mathbf{5 0 - 6 4}$ | $\mathbf{6 5 +}$ | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 15,6 | 81,8 | 84,4 | 66,2 | 10,9 | 37,5 | 17,8 | 18,2 | 100,0 |
| Female | 15,0 | 80,2 | 85,0 | 65,2 | 10,7 | 36,5 | 18,1 | 19,8 | 100,0 |
| Male | 16,3 | 83,4 | 83,7 | 67,1 | 11,2 | 38,5 | 17,5 | 16,6 | 100,0 |

3e. Risk-of-poverty rate by age and gender
Distribution of poor population by gender

| Total | Female | Male |
| :--- | :--- | :--- |
| 100,00 | 53,7 | 46,3 |

3f. Risk-of-poverty rate by age and gender
Distribution of poor population by age and gender

|  | $\mathbf{0 - 1 5}$ | $\mathbf{0 - 6 4}$ | $\mathbf{1 6 +}$ | $\mathbf{1 6 - 6 4}$ | $\mathbf{1 6 - 2 4}$ | $\mathbf{2 5 - 4 9}$ | $\mathbf{5 0 - 6 4}$ | $\mathbf{6 5 +}$ | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 15,4 | 74,4 | 84,6 | 59,0 | 12,8 | 29,5 | 16,7 | 25,6 | 100,0 |
| Female | 13,7 | 71,6 | 86,3 | 57,9 | 12,3 | 29,3 | 16,3 | 28,4 | 100,0 |
| Male | 17,3 | 77,6 | 82,7 | 60,3 | 13,4 | 29,9 | 17,1 | 22,4 | 100,0 |

4a. Risk-of-poverty rate by most frequent activity and gender
Below ARPT

| Activity status | Total | Female | Male |
| :--- | :--- | :--- | :--- |
| Total | 20,0 | 21,5 | 18,4 |
| At work | 13,2 | 11,9 | 14,1 |
| Not at work: total | 26,1 | 26,8 | 24,9 |
| Not at work: Unemployment | 31,2 | 29,3 | 34,0 |
| Not at work: Retired | 25,7 | 29,7 | 22,6 |
| Not at work: Other inactive | 25,6 | 25,2 | 26,8 |



Above ARPT

| Activity status | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 80,0 | 78,5 | 81,6 |
| At work | 86,8 | 88,1 | 85,9 |
| Not at work: total | 73,9 | 73,2 | 75,1 |
| Not at work: <br> Unemployed | 68,8 | 70,7 | 66,0 |
| Not at work: Retired | 74,3 | 70,3 | 77,4 |
| Not at work: Other <br> inactive | 74,4 | 74,8 | 73,2 |

## 4b. Risk-of-poverty rate by most frequent activity and gender

Total

| Activity status | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 13.784 | 7.161 | 6.623 |
| At work | 6.365 | 2.473 | 3.892 |
| Not at work: total | 7.419 | 4.688 | 2.731 |
| Not at work: <br> Unemployment | 656 | 390 | 266 |
| Not at work: Retired | 3.635 | 2.919 | 716 |
| Not at work: Other <br> inactive | 1.379 | 1.749 |  |

## Below ARPT

| Activity status | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 2.987 | 1.644 | 1.343 |
| At work | 930 | 316 | 614 |
| Not at work: total | 2.057 | 1.328 | 729 |
| Not at work: <br> Unemployment | 215 | 116 | 99 |
| Not at work: Retired | 847 | 428 | 419 |
| Not at work: Other <br> inactive | 995 | 784 | 211 |

Above ARPT

| Activity status | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 10.797 | 5.517 | 5.280 |
| At work | 5.435 | 2.157 | 3.278 |
| Not at work: total | 5.362 | 3.360 | 2.002 |
| Not at work: <br> Unemployment | 441 | 274 | 167 |
| Not at work: Retired | 2.281 | 951 | 1.330 |
| Not at work: Other <br> inactive | 2.640 | 2.135 | 505 |

4c. Risk-of-poverty rate by most frequent activity and gender

## Distribution of total population

| Activity status | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 100,0 | 100,0 | 100,0 |
| At work | 47,8 | 35,9 | 60,3 |
| Not at work: total | 52,2 | 64,1 | 39,7 |
| Not at work: <br> Unemployment | 4,9 | 5,6 | 4,1 |
| Not at work: Retired | 21,2 | 18,3 | 24,4 |
| Not at work: Other <br> inactive | 26,1 | 40,2 | 11,2 |

4d. Risk-of-poverty rate by most frequent activity and gender
Distribution of poor population

| Activity status | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 100,0 | 100,0 | 100,0 |
| At work | 31,6 | 19,8 | 46,2 |
| Not at work: total | 68,4 | 80,2 | 53,8 |
| Not at work: <br> Unemployment | 7,6 | 7,6 | 7,5 |
| Not at work: Retired | 27,3 | 25,2 | 29,9 |
| Not at work: Other <br> inactive | 33,4 | 16,4 | 47,3 |

5a. Risk-of-poverty rate by household type

| Household type | Below ARPT | Above ARPT |
| :--- | :---: | :---: |
| Total no dependent children | 19,9 | 80,1 |
| 1 person (total) | 29,2 | 70,8 |
| 2 adults, both < 65 years | 14,4 | 85,6 |
| 2 adults, at least one 65+ years | 28,7 | 71,3 |
| Other no dependent children | 14,5 | 85,5 |
| Total dependent children | 20,1 | 79,9 |
| Single parent, at least 1 dependent <br> child | 37,6 | 62,4 |
| 2 adults, 1 dependent child | 15,1 | 84,9 |
| 2 adults, 2 dependent children | 18,5 | 81,5 |
| 2 adults, 3+ dependent children | 31,5 | 68,5 |
| Other households with dependent <br> children | 26,4 | 73,6 |

5b. Risk-of-poverty rate by household type

| Household type | Total | Below <br> ARPT | Above <br> ARPT |
| :--- | :---: | :---: | :---: |
| Total no dependent children | 8.277 | $\mathbf{N}$ | $\boldsymbol{N}$ |
| 1 person (total) | 1.297 | 393 | 6.555 |
| 2 adults, both < 65 years | 1.562 | 246 | 1.316 |
| 2 adults, at least one 65+ years | 2.076 | 598 | 1.478 |
| Other no dependent children | 3.342 | 485 | 2.857 |
| Total dependent children | 8.544 | 1.986 | 6.558 |
| Single parent, at least 1 dependent <br> child | 277 | 98 | 179 |
| 2 adults, 1 dependent child | 1.806 | 282 | 1.524 |
| 2 adults, 2 dependent children | 3.100 | 576 | 2.524 |
| 2 adults, 3+ dependent children | 1.088 | 331 | 757 |
| Other households with dependent <br> children | 2.273 | 699 | 1.574 |

5c. Risk-of-poverty rate by household type

## Single households

|  | female | Male | $<\mathbf{6 5}$ | $\mathbf{6 5 +}$ |
| :--- | :---: | :---: | :---: | :---: |
| Below ARPT | 34,3 | 19,6 | 20,6 | 36,5 |
| Above ARPT | 65,7 | 80,4 | 79,4 | 63,5 |

5d. Risk-of-poverty rate by household type

## Single households)

|  | Female | Male | $<\mathbf{6 5}$ | $\mathbf{6 5 +}$ |
| :--- | :---: | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ | $N$ |
| Total | 854 | 443 | 574 | 723 |
| Below ARPT | 297 | 96 | 121 | 272 |
| Above ARPT | 557 | 347 | 453 | 451 |

5e. Risk-of-poverty rate by household type
Distribution of total population

| Household type | \% |
| :--- | :---: |
| Total no dependent children | 50,2 |
| 1 person (total) | 7,4 |
| 2 adults, both < 65 years | 8,8 |
| 2 adults, at least one 65+ years | 11,5 |
| Other no dependent children | 22,5 |
| Total dependent children | 49,8 |
| Single parent, at least 1 dependent child | 1,7 |
| 2 adults, 1 dependent child | 11,3 |
| 2 adults, 2 dependent children | 26,7 |
| 2 adults, 3+ dependent children | 1,2 |
| Other households with dependent children | 8,9 |

5f. Risk-of-poverty rate by household type
Distribution of total population (single households)

| Total | Female | Male | $\mathbf{6 5}$ | $\mathbf{6 5 +}$ |
| :--- | :---: | :---: | :--- | :--- |
| 100,00 | 65,6 | 34,4 | 45,7 | 54,3 |

5g. Risk-of-poverty rate by household type

## Distribution of poor population

| Household type | \% |
| :--- | :---: |
| Total no dependent children | 50,0 |
| 1 person (total) | 10,8 |
| 2 adults, both < 65 years | 6,3 |
| 2 adults, at least one 65+ years | 16,5 |
| Other no dependent children | 16,3 |
| Total dependent children | 50,0 |
| Single parent, at least 1 dependent child | 3,2 |
| 2 adults, 1 dependent child | 8,5 |
| 2 adults, 2 dependent children | 24,7 |
| 2 adults, 3+ dependent children | 1,9 |
| Other households with dependent children | 11,7 |

5h. Risk-of-poverty rate by household type
Distribution of poor population (single households)

| Total | Female | Male | $<\mathbf{6 5}$ | $\mathbf{6 5 +}$ |
| :---: | :---: | :---: | :---: | :---: |
| 100,00 | 77,0 | 23,0 | 32,1 | 67,9 |

6a. Risk-of-poverty rate by tenure status

|  | Total | Owner or rent-free | Tenant |
| :--- | :---: | :---: | :---: |
| Below ARPT | 20,0 | 20,1 | 19,7 |
| Above ARPT | 80,0 | 79,9 | 80,3 |

6b. Risk-of-poverty rate by tenure status

|  | Total | Owner or rent-free | Tenant |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 16.849 | 13.923 | 2.926 |
| Below ARPT | 3.719 | 3.064 | 655 |
| Above ARPT | 13.130 | 10.859 | 2.271 |

6c. Risk-of-poverty rate by tenure status

## Distribution of total population

| Total | Owner or rent-free | Tenant |
| :---: | :---: | :---: |
| 100,0 | 80,2 | 19,8 |

## 6d. Risk-of-poverty rate by tenure status

## Distribution of poor population

| Total | Owner or rent-free | Tenant |
| :---: | :---: | :---: |
| 100,0 | 80,6 | 19,4 |

7a. Risk-of-poverty rate by work intensity

| Household type by work <br> intensity | Below ARPT | Above ARPT |
| :--- | :---: | :---: |
| Household without dependent <br> children W=0 | 29,2 | 70,8 |
| Household without dependent <br> children $0<\mathrm{W}<1$ | 13,6 | 86,4 |
| Household without dependent <br> children W=1 | 10,3 | 89,7 |
| Household with dependent <br> children W=0 | 51,9 | 48,1 |
| Household with dependent <br> children $0<\mathrm{W}<0.5$ | 45,7 | 54,3 |
| Household with dependent <br> children $0.5<\mathrm{W}<1$ | 22,4 | 77,6 |
| Household with dependent <br> children $\mathrm{W}=1$ | 10,6 | 89,4 |

7b. Risk-of-poverty rate by by work intensity

| Household type by work <br> intensity | Total | Below ARPT | Above ARPT |
| :--- | :---: | :---: | :---: |
|  | $\boldsymbol{N}$ | $\boldsymbol{N}$ | $\boldsymbol{N}$ |
| Household without dependent <br> children W=0 | 1.120 | 323 | 797 |
| Household without dependent <br> children 0<W<1 | 3.089 | 430 | 2.659 |
| Household without dependent <br> children W=1 | 1.816 | 202 | 1.614 |
| Household with dependent <br> children W=0 | 309 | 178 | 131 |
| Household with dependent <br> children $0<\mathrm{W}<0.5$ | 712 | 368 | 344 |
| Household with dependent <br> children $0.5<\mathrm{W}<1$ | 4.089 | 1.002 | 3.087 |
| Household with dependent <br> children W=1 | 3.340 | 399 | 2.941 |

## 7c. Risk-of-poverty rate by by work intensity

## Distribution of total population

| Household type by work intensity | \% |
| :--- | :---: |
| Total | 100,0 |
| Household without dependent children $\mathrm{W}=0$ | 7,7 |
| Household without dependent children $0<\mathrm{W}<1$ | 23,0 |
| Household without dependent children $\mathrm{W}=1$ | 12,6 |
| Household with dependent children $\mathrm{W}=0$ | 2,3 |
| Household with dependent children $0<\mathrm{W}<0.5$ | 3,4 |
| Household with dependent children $0.5<\mathrm{W}<1$ | 26,5 |
| Household with dependent children $\mathrm{W}=1$ | 24,5 |

7d. Risk-of-poverty rate by by work intensity
Distribution of poor population

| Household type by work intensity | \% |
| :--- | :---: |
| Total | 100,0 |
| Household without dependent children $\mathrm{W}=0$ | 12,6 |
| Household without dependent children $0<\mathrm{W}<1$ | 17,4 |
| Household without dependent children $\mathrm{W}=1$ | 7,3 |
| Household with dependent children $\mathrm{W}=0$ | 6,6 |
| Household with dependent children $0<\mathrm{W}<0.5$ | 8,5 |
| Household with dependent children $0.5<\mathrm{W}<1$ | 33,0 |
| Household with dependent children $\mathrm{W}=1$ | 14,5 |

8a. Dispersion around at-risk-poverty-threshold

| Threshold | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| $40 \%$ of median | $\%$ | $\%$ | $\%$ |
| Below ARPT | 7,5 | 8,0 | 6,9 |
| Above ARPT | 92,5 | 92,0 | 93,1 |
| $50 \%$ of median | $\%$ | $\%$ | $\%$ |
| Below ARPT | 12,8 | 13,6 | 11,9 |
| Above ARPT | 87,2 | 86,4 | 88,1 |
| $70 \%$ of median | 27,6 | 28,9 | 26,4 |
| Below ARPT | 72,4 | 71,1 | 73,6 |
| Above ARPT |  |  | $\%$ |



8b. Dispersion around at-risk-poverty-threshold

| Threshold | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 16.849 | 8.692 | 8.157 |
| $40 \%$ of median | $N$ | $N$ | $N$ |
| Below ARPT | 1.463 | 792 | 671 |
| Above ARPT | 15.386 | 7.900 | 7.486 |
| $50 \%$ of median | $N$ | $N$ | $N$ |
| Below ARPT | 2.437 | 1.322 | 1.115 |
| Above ARPT | $N$ | 7.412 | 7.370 |
| $70 \%$ of median | 5.124 | 2.737 | 2.387 |
| Below ARPT | 11.725 | 5.955 | 5.770 |
| Above ARPT |  |  | $N$ |

9a. Risk-of-poverty rate by age and gender before all transfers
Below ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 39,8 | 42,4 | 37,1 |
| $0-15$ | 23,3 | 23,3 | 23,2 |
| $16+$ | 42,9 | 45,7 | 39,8 |
| $16-64$ | 31,4 | 33,6 | 29,2 |
| $65+$ | 84,6 | 85,9 | 82,9 |

Above ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 60,2 | 57,6 | 62,9 |
| $0-15$ | 76,7 | 76,7 | 76,8 |
| $16+$ | 57,1 | 54,3 | 60,2 |
| $16-64$ | 68,6 | 66,4 | 70,8 |
| $65+$ | 15,4 | 14,1 | 17,1 |

9b. Risk-of-poverty rate by age and gender before all transfers
Total

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 16.805 | 8.673 | 8.132 |
| $0-15$ | 2.762 | 1.381 | 1.381 |
| $16+$ | 14.043 | 7.292 | 6.751 |
| $16-64$ | 10.778 | 5.486 | 5.292 |
| $65+$ | 3.265 | 1.806 | 1.459 |

## Below ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 7.179 | 3.879 | 3.300 |
| $0-15$ | 804 | 400 | 404 |
| $16+$ | 6.375 | 3.479 | 2.896 |
| $16-64$ | 3.607 | 1.933 | 1.674 |
| $65+$ | 2.768 | 1.546 | 1.222 |

Above ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 9.626 | 4.794 | 4.832 |
| $0-15$ | 1.958 | 981 | 977 |
| $16+$ | 7.668 | 3.813 | 3.855 |
| $16-64$ | 7.171 | 3.553 | 3.618 |
| $65+$ | 497 | 260 | 237 |

9c. Risk-of-poverty rate by age and gender before transfers (including pensions)
Below ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 22,7 | 24,0 | 21,4 |
| $0-15$ | 21,6 | 21,6 | 21,7 |
| $16+$ | 22,9 | 24,5 | 21,3 |
| $16-64$ | 20,2 | 21,1 | 19,3 |
| $65+$ | 32,8 | 35,5 | 29,5 |

Above ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 77,3 | 76,0 | 78,6 |
| $0-15$ | 78,4 | 78,4 | 78,3 |
| $16+$ | 77,1 | 75,5 | 78,7 |
| $16-64$ | 79,8 | 78,9 | 80,7 |
| $65+$ | 67,2 | 64,5 | 70,5 |

9d. Risk-of-poverty rate by age and gender before transfers (including pensions)

## Total

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 16.805 | 8.673 | 8.132 |
| $0-15$ | 2.762 | 1.381 | 1.381 |
| $16+$ | 14.043 | 7.292 | 6.751 |
| $16-64$ | 10.778 | 5.486 | 5.292 |
| $65+$ | 3.265 | 1.806 | 1.459 |

Below ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 4.243 | 2.283 | 1.960 |
| $0-15$ | 735 | 364 | 371 |
| $16+$ | 3.508 | 1.919 | 1.589 |
| $16-64$ | 2.399 | 1.260 | 1.139 |
| $65+$ | 1.109 | 659 | 450 |

Above ARPT

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 12.562 | 6.390 | 6.172 |
| $0-15$ | 2.027 | 1.017 | 1.010 |
| $16+$ | 10.535 | 5.373 | 5.162 |
| $16-64$ | 8.379 | 4.226 | 4.153 |
| $65+$ | 2.156 | 1.147 | 1.009 |

10a. Relative median risk-of-poverty gap by age and gender

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
| Total | 24,5 | 25,5 | 24,3 |
| $0-15$ | 19,1 |  |  |
| $16+$ | 25,3 | 26,0 | 24,5 |
| $16-64$ | 25,0 | 25,3 | 25,0 |
| $65+$ | 26,0 | 26,8 | 22,7 |

10b. Relative median risk-of-poverty gap by age and gender

| Age | Total | Female | Male |
| :--- | :---: | :---: | :---: |
|  | $N$ | $N$ | $N$ |
| Total | 3.719 | 1.996 | 1.723 |
| $0-15$ | 653 |  |  |
| $16+$ | 3.066 | 1.675 | 1.391 |
| $16-64$ | 2.111 | 1.111 | 1.000 |
| $65+$ | 955 | 564 | 391 |

11. $\mathbf{S 8 0} / \mathbf{S 2 0}$ quintile share ratio: $\mathbf{6 , 0}$
12. Gini coefficient: 33,1
1.1 Other indicators
1.2.1. Mean equivalized income: $10.185,69$
1.2.2. The unadjusted gender pay gap: 10

### 1.3. Social exclusion indicators

1.3.1. Non monetary household deprivation indicators, including problems in making ends meet, extent of debt and enforced lack of basic necessities

### 1.3.1.1. Fullfilment of basic needs

| Fullfilment of basic needs | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Capacity to face <br> unexpected financial <br> expenses | 38,6 | 60,2 | 33,1 |
| Capacity to afford paying for <br> one annual holiday away from <br> home | 49,9 | 82,2 | 41,8 |
| Capacity to afford a meal <br> with meat, chicken, fish (or <br> vegetarian equivalent) <br> every second day | 10,3 | 24,7 | 6,7 |

### 1.3.1.2. Quality of life

| Quality of life - Percentage <br> of household that cannot <br> afford : | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Color TV | 0,8 | 2,4 | 0,4 |
| Telephone (including <br> mobile phone) | 1,1 | 3,3 | 0,5 |
| Computer | 17,9 | 19,7 | 17,5 |
| Washing mashine | 3,8 | 9,3 | 2,4 |
| Car | 13,5 | 20,1 | 11,9 |

### 1.3.1.3. Ability to make ends meet

| Ability to make ends meet | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| With great difficulty | 15,1 | 32,3 | 10,8 |
| With difficulty | 31,1 | 39,8 | 28,9 |
| With some difficulty | 25,1 | 19,0 | 26,6 |
| Fairly easily | 15,9 | 7,4 | 18,0 |
| Easily | 11,0 | 1,4 | 13,3 |
| Very easily | 1,9 | 0,1 | 2,4 |

1.3.1.4. Lowest monthly income to make ends meet

| Lowest monthly income to <br> make ends meet | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Lowest monthly income to <br> make ends meet | 1.862 | 1.236 | 2.018 |

### 1.3.1.5. Financial burden of the total household cost

| Financial burden of the <br> total household cost | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| A heavy burden | 20,7 | 29,9 | 18,5 |
| Somewhat aburden | 71,1 | 63,1 | 73,1 |
| Not a burden at all | 8,2 | 7,0 | 8,5 |

1.3.1.6. Financial burden of the repayment of debts from hire purchases or loans

| Financial burden of the <br> repayment of debts from <br> hire purchases or loans | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Repayment is a heavy <br> burden | 6,3 | 5,5 | 6,5 |
| Repayment is <br> somewhat of a burden | 17,1 | 8,1 | 19,4 |
| Repayment is not a <br> burden at all | 3,6 | 1,7 | 4,1 |

### 1.3.2. Rhysical and social enviroment

| Rhysical and social <br> enviroment | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Problems with the dwelling <br> dark, not enough light | 7,7 | 9,1 | 7,3 |
| Noise from <br> neighbours or from the <br> street | 18,6 | 14,1 | 19,7 |
| Pollution, grime, or <br> other environmental <br> problems | 15,1 | 10,3 | 16,3 |
| Crime violence or <br> vandalism in the area | 8,0 | 5,2 | 8,7 |

### 1.3.3. Housing and non housing related arrears

| Arrears on utility bills | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Rent or mortgage <br> repayment | 9,0 | 11,7 | 8,3 |
| Utility bills (electricity, <br> water, gas, etc.) | 25,5 | 41,1 | 21,5 |
| Credit cards payment, or <br> loan repayments for <br> household items, <br> holidays, etc. | 10,6 | 9,5 | 10,9 |

### 1.3.4. Housing conditions

| Housing conditions | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Leaking roof, damp walls/ <br> floors/ foundation or rot in <br> window frames or floor | 20,7 | 31,9 | 17,9 |
| Ability to keep home <br> adequately warm | 19,4 | 36,0 | 15,3 |

### 1.3.5. Amenities in the dwelling

| Amenities in the dwelling | Total <br> population | Population in <br> risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Bath or shower in the <br> dwelling | 2,9 | 8,1 | 1,6 |
| Indoor flushing toilet for <br> sole use of households | 4,5 | 12,2 | 2,4 |

### 1.4. Other social indicators

### 1.4.1. General health for household members aged 16 and over

| General health for <br> household members aged <br> $\mathbf{1 6}$ and over | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in <br> risk-of- <br> poverty |
| :--- | :---: | :---: | :---: |
| Very good | 56,9 | 46,6 | 59,5 |
| Good | 20,9 | 21,2 | 20,8 |
| Fair | 13,4 | 18,2 | 12,3 |
| Bad | 6,3 | 10,5 | 5,2 |
| Very bad | 2,5 | 3,5 | 2,3 |

1.4.2. Unmet need for medical examination or treatment for household members aged 16 and over

| Unmet need for medical <br> examination or treatment <br> for household members <br> aged 16 and over | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Doctors of any specialization | 5,3 | 8,1 | 4,3 |
| Dentists | 5,8 | 8,9 | 5,3 |

1.4.3. Highest ISCED level attained for household members aged 16 and over

| Highest ISCED level <br> attained for household <br> members aged 16 and <br> over | Total <br> population | Population <br> in risk-of- <br> poverty | Population <br> not in risk- <br> of-poverty |
| :--- | :---: | :---: | :---: |
| Pre-primary education | 2,9 | 6,5 | 2,0 |
| Primary education | 36,0 | 52,1 | 32,0 |
| Lower secondary education | 12,5 | 14,0 | 12,1 |
| Upper secondary education | 28,6 | 20,6 | 30,6 |
| Post secondary non tertiary <br> education | 4,3 | 2,8 | 4,7 |
| First stage of tertiary <br> education (not leading directl <br> advanced research <br> qualification) | 15,3 | 4,0 | 18,2 |
| Second Stage of tertiary <br> Jeducation (leading to an <br> advanced research <br> qualification) | 0,4 | 0,0 | 0,5 |

## 2. ACCURACY

### 2.1 Sample design

### 2.1.1 Type of sample design

The two-stage area sampling was applied for the EU-SILC survey.

### 2.1.2 Sample units

The sample of private households was selected in two stages. The primary units are the areas (one or more unified building blocks) and the ultimate sampling units selected in each sampling area are the households.

### 2.1.3 Stratification and substratification criteria

There are two levels of area stratification in the sampling design. The first level is geographical stratification based on the partition of the total country area into thirteen standard administrative regions corresponding to the European NUTS II level. The two major city agglomerations of Greater Athens and Greater Thessalonica constitute separate major geographical strata.

The second level of stratification entails grouping municipalities and communes within each NUTS II administrative region by degree of urbanization, i.e., according to their population size. The scaling of urbanization was finally designed in four groups:

- $>=30.000$ inhabitants
- 5.000-29.999 inhabitants
- 1.000-4.999 inhabitants
- 0-999 inhabitants

The number of final strata in thirteen (13) geographical regions was 50 . The Greater Athens Area was divided into 31 strata of about equal size (equal number of households) on the basis of the lists of city blocks of the Municipalities that constitute it and taking into consideration socio-economic criteria. Similarly, the Greater Thessaloniki Area was divided into 9 equally sized strata. The two Major City Agglomerations account for about $38 \%$ of total population and for even larger percentages in certain socio-economic variables. Thus, the total number of strata of the survey was 90 .

### 2.1.4 Sample size and allocation criteria

The initial sample size is 8.000 households (the sampling fraction is about $2 \%$ ). This fraction was the same in each geographical region.

The geographical regions (NUTS II) in Greece are 13 in number. However, throughout this study the $2^{\text {nd }}$ geographical region (Central Macedonia) was considered without Greater Thessaloniki and the $9^{\text {th }}$ geographical region (Attica) without the Greater Athens area, while either of these two major agglomerations was treated as a geographical region.

Table 1: Sample size and achieved response by NUTS2-units

| NUTS2 | Name | Drawn | Accepted <br> (DB135=1) |
| :--- | :--- | :---: | :---: |
| GR11 | Thraki and Anatoliki <br> Makedonia | 413 | 390 |
| GR12 | Kentriki Makedonia | 1.250 | 1.141 |
| GR13 | Dytiki Makedonia | 197 | 190 |
| GR14 | Thessalia | 512 | 486 |
| GR21 | Ipeiros | 227 | 213 |
| GR22 | Ionia Nisia | 96 | 88 |
| GR23 | Dytiki Ellada | 425 | 395 |
| GR24 | Sterea Ellada | 336 | 308 |
| GR25 | Peloponnisos | 395 | 363 |
| GR30 | Attiki | 2.564 | 1.994 |
| GR41 | Voreio Aigaio | 154 | 139 |
| GR42 | Notio Aigaio | 189 | 169 |
| GR43 | Kriti | 417 | 376 |
| Total | Total | $\mathbf{7 . 1 7 5}$ | $\mathbf{6 . 2 5 2}$ |

### 2.1.5 Sample selection schemes

## $1{ }^{\text {st }}$ stage of sampling

In this stage, from any ultimate stratum (crossing of Region with the degree of urbanization), say stratum $\boldsymbol{h}, \boldsymbol{n}_{\boldsymbol{h}}$ primary units were drawn (where the number $\boldsymbol{n}_{\boldsymbol{h}}$ of draws was approximately proportional to the population size $\boldsymbol{X}_{\boldsymbol{h}}$ of the stratum (number of households according to the last population census of the year 2001).

Each area unit (primary unit) of the stratum had a selection probability proportional to its size. So, if $\boldsymbol{X}_{\boldsymbol{h} \boldsymbol{i}}$ be the number of households-according to the 2001 population census- of the unit in the sample of order $\boldsymbol{I}$, then the probability of being drawn was:

$$
\begin{equation*}
P_{h i}=\frac{X_{h i}}{X_{h}} \tag{1}
\end{equation*}
$$

The total number of the primary sampling units is 1.056 areas.
As in each year the $25 \%$ of the sample households is replaced, the new households belong to different primary sampling units.

## $2^{\text {nd }}$ stage of sampling

In this stage from each primary sampling unit (selected area) the sample of ultimate units (households) is selected. Actually, in the second stage we drew a sample of dwellings. However, in most cases, there is one to one relation between household and dwelling. If the selected dwelling constitutes of one or more households then all of them are interviewed.

Let $M_{h i}$ be the number of households during the survey period in the $i$ selected area of the stratum $h$. Out of them a systematic sample of $m_{h i}$ households is selected with equal probabilities. Each of $m_{h i}$ households has the same chance to be included in the survey, equal to: $\frac{m_{h i}}{M_{h i}}$

In any selected primary unit, the determination of the sample size $m_{h i}$ remains. The total number of households to be interviewed of the $n_{h}$ selected primary sampling units will be

$$
\begin{equation*}
m_{h}=\sum_{i=1}^{n_{h}} m_{h i} \tag{2}
\end{equation*}
$$

i.e. finally by applying the two stage sampling procedure, from the stratum is drawn the percentage of households $\frac{m_{h}}{M_{h}}$.

In repeated sampling, the numerator of this fraction will vary from sample to sample, in to more specific the fraction $\frac{m_{h}}{M_{h}}$ will be a random variable. Within primary sampling unit the calculation of sampling interval $\delta_{h i}=\frac{M_{h i}}{m_{h i}}$ will be carried out, this enabling the following two desired conditions to be satisfied.
a) The expected result $\frac{m_{h}}{M_{h}}$ should be the predetermined over sampling fraction $\frac{1}{\lambda}$ in each geographical region (NUTS II): $E\left(\frac{m_{h}}{M_{h}}\right)=\frac{1}{\lambda}=2 \%$
b) The estimator of the stratum total $Y_{h}$ (for any characteristic) should be selfweighting. In other words, the estimation calculated is the result derived from the sum of the values of the characteristic over the $m_{h}$ sample households by the overall raising factor $\lambda$, which is the same in each geographical region.

The conditions (a) and (b) are satisfied when:

$$
\begin{gathered}
\frac{1}{n_{h}} \cdot \frac{1}{P_{h i}} \cdot \frac{M_{h i}}{m_{h i}}=\lambda(3) \Rightarrow \\
\frac{1}{n_{h}} \cdot \frac{1}{P_{h i}} \cdot \delta_{h i}=\lambda \Rightarrow
\end{gathered}
$$

$$
\begin{equation*}
\delta_{h i}=\frac{M_{h i}}{m_{h i}}=\lambda \cdot n_{h} \cdot P_{h i} \tag{4}
\end{equation*}
$$

### 2.1.6 Sample distribution over time

As the survey is annual the sample of households is not distributed over time. The survey is carried out during the $1^{\text {st }}$ quarter of the year with reference period of data the previous year.

### 2.1.7 Renewal of the sample: rotational groups

The survey is a simple rotational design survey (which means once the system is fully established). The sample for any year consists of 4 replications, which have been in the survey for 1-4 years. With the exception of the first tree years of survey, any particular replication remains in the survey for 4 years, each year one of the 4 replications from the previous year is dropped and a new one added. Between year T and $\mathrm{T}+1$ the sample overlap is $75 \%$; the overlap between year T and year $\mathrm{T}+2$ is $50 \%$; and it is reduced to $25 \%$ from year T to year $\mathrm{T}+3$, and to zero for longer intervals.

### 2.1.8 Weightings

### 2.1.8.1._Design factor

For the computation of the sample household design weights as well for the computation of the cross sectional weights of the survey in general, the EC-Eurostat document EU-SILC Doc. 157/05 was used.

For households in panel 5-panel 5 replaced panel 1 and is of wave 1 - the household design weight (target variable DB080) is defined as the inverse of its probability of selection.
$\frac{1}{n_{h}} \cdot \frac{1}{P_{h i}} \cdot \frac{M_{h i}}{m_{h i}}=D W_{h i}$
$\boldsymbol{M}_{\boldsymbol{h} \boldsymbol{i}}=$ the number of households in the updated sampling frame in $\boldsymbol{h i}$ area (primary unit).
$\boldsymbol{m}_{\boldsymbol{h} \boldsymbol{i}} \quad=$ the number of selected households in $\boldsymbol{h i}$ area (primary unit).
$\boldsymbol{n}_{\boldsymbol{h}} \quad=$ the sample size of primary units in $\boldsymbol{h}$ stratum.
$\boldsymbol{P}_{\boldsymbol{h} \boldsymbol{i}} \quad=$ the selection probability of $\boldsymbol{h i}$ primary unit.
For households in panels 2,3 and 4 the household design weights were defined by applying the general procedure of EU-SILC Doc.157/05:

- Computation of panel person design weights
- Correction for non-response due to attrition
- Computation of sub-sample household weights
- Computation of sample household design weights


### 2.1.8.2. Non-response adjustments

Within each design stratum, the non-response adjustment of the responding households is carried out by the inverse of the response rate, so as to "make up" for non-responding cases in that stratum.

Target variable DB080 was adjusted for non-response for the variables DB120 (record of contact at address) and DB130 (household questionnaire result). The corrections were conducted at subsequent steps. The multiplication of DB080 with each one of the two corrections, results in a corrected DB080 weight that is used as initial weight in the calibration procedure referred in the following paragraph.

### 2.1.8.3. Adjustment to external data (level, variables used and sources)

This involves the calibration of the household and personal weights in conjunctions with external sources (Projections for population totals for year 2004). Thus, it enables the distribution of auxiliary variables on both household and individual level.

The auxiliary variables used at household level are the household size, the tenure status and the Geographical Region (NUTS II). Also, at personal level the auxiliary variable used is the distribution of population by age (five years age groups) and sex.

The weights obtained after this procedure of calibration are the household cross-sectional weights (variable: DB090). As all the household members reply to the household questionnaire, DB090 is also the weight of each member of the household (variable: RB050).

The last step involves the calculation of the personal cross sectional weights for household members aged of 16 and over (variable: PB040). The calibration procedure was applied again using as initial weights variable RB050 and as auxiliary variable the distribution of population aged 16 and over by age (five years age groups) and sex.

### 2.1.8.4. Final cross-sectional weight

Already calculated as mentioned above.

### 2.1.9. Substitutions

No substitution was applied in the Greek Survey.

### 2.2 Sampling Errors

### 2.2.1 Estimation of survey characteristics

This paragraph presents the general procedure applied in order to estimate the survey characteristics and also the survey characteristics required for the calculations of standard errors and effective sample size for the common cross-sectional EU indicators based on the cross-sectional component of EU-SILC, for the equivalised disposable income and for the unadjusted gender pay gap.

Let $\mathcal{Y}_{h i j}$ be the value of the characteristic $\mathbf{y}$ (of the sampling household of order $j$ in case of a household survey characteristic or for the sampling member of order $j$ in case of a household member survey characteristic, $j=1,2, \ldots, \boldsymbol{m}_{h i}$ ) of the hi area. Moreover $Y_{h}$ stands for the stratum total, which results when adding the characteristic $y$ from all households or household members included in the stratum $h$.

The form of the estimator on the basis of the two-stage design is:

$$
\begin{equation*}
\hat{Y}_{h}=\sum_{i=1}^{n_{h}} \sum_{j=1}^{m_{h i}} w_{h i j} \cdot y_{h i j} \tag{6}
\end{equation*}
$$

In the case of equivalised disposable income, $w_{h i j}$ stands for DB090, in the case of unadjusted gender pay gap, $w_{h i j}$ stands for PB040, while in the case of common crosssectional indicators, ${ }^{w_{h i j}}$ stands for RB050 corrected for the effect of missing values (page 9 of the EU-SILC 131-rev/04 document).

For estimating the characteristic $\mathbf{y}$ in country level, all stratum estimates $Y_{h}$ should be added, as follows:

$$
\hat{Y}=\sum_{h} \hat{Y}_{h}{ }^{(7)}
$$

The estimation of the number of households or household members $X_{h}$ in stratum h is calculated using the formula:

$$
\begin{equation*}
\hat{X}_{h}=\sum_{i=1}^{n_{h}} \sum_{j=1}^{m_{h i}} w_{h i j} \tag{8}
\end{equation*}
$$

while the estimation of the relevant characteristic in country level is calculated by adding all strata estimations, that is:

$$
\begin{equation*}
\hat{X}_{h}=\sum_{h} \hat{\mathrm{X}}_{\mathrm{h}} \tag{9}
\end{equation*}
$$

In order to estimate the variances of the required characteristics, the following steps should be implemented.
a. For every selected PSU $i$ of the stratum $h$, we calculate the quantities $T_{h i}$ and $F_{h i}$ using the following formulas:

$$
\begin{gather*}
T_{h i}=\boldsymbol{n}_{h} \cdot \sum_{j=1}^{m h i} \mathcal{W}_{h i j} \cdot y_{h i j}  \tag{10}\\
F_{h i}=\boldsymbol{n}_{h} \cdot \sum_{j=1}^{m_{m i i}} \mathcal{W}_{h i j}
\end{gather*}
$$

b. Since $T_{h i}$ and $F_{h i}$ have been calculated for every PSU $i\left(i=1,2, \ldots, \boldsymbol{n}_{h}\right)$ of the stratum $h$, then :
$V\left(\hat{Y}_{h}\right)$ is calculated as:

$$
\begin{equation*}
V\left(\hat{Y}_{h}\right)=\frac{1}{n_{h \cdot\left(n_{h}-1\right)}} \cdot\left[\sum_{i=1}^{n_{h}} T_{h i}^{2}-\frac{1}{n_{h}} \cdot\left(\sum_{i=1}^{n_{h}} T_{h i}\right)^{2}\right] \tag{12}
\end{equation*}
$$

and
$V(\hat{Y})$ (country level) is calculated by adding $V\left(\hat{Y}_{h}\right)$ for all strata $h$, that is:

$$
\begin{equation*}
V(\hat{Y})=\sum_{h} V\binom{\wedge}{Y_{h}} \tag{13}
\end{equation*}
$$

Correspondingly, $V\left(\hat{X}_{h}\right)$ is given by:

$$
\begin{equation*}
V\left(\hat{X}_{h}\right)=\frac{1}{n_{h \cdot( }^{\left.n_{h}-1\right)}} \cdot\left[\sum_{i=1}^{n_{h}} F_{h i}^{2}-\frac{1}{n_{h}} \cdot\left(\sum_{i=1}^{n_{h}} F_{h i}\right)^{2}\right] \tag{14}
\end{equation*}
$$

and
$V(\hat{X})$ (country level) is calculated by adding $V\left(\hat{X}_{h}\right)$ for all strata $h$, that is:

$$
\begin{equation*}
V(\hat{X})=\sum_{h} V\binom{\wedge}{X_{h}} \tag{15}
\end{equation*}
$$

The formulas above can be used for the equivalised disposable income. Especially for the unadjusted gender pay gap $R$, expressed as $R=\frac{R 1}{R 2}$,
where

$$
R 1=\frac{\sum_{P B 150=2 \text { and } P L 035=1 \text { and } 16<=A G E<=64} w_{h i j} \cdot H O U R L Y \_E A R N I N G S}{\sum_{P B 150=2 \text { andPL035=1 and } 16<=A G E<=64} w_{h i j}}
$$

and

$$
R 2=\frac{\sum_{P B 150=1 \text { andPL } 035=1 \text { and } 16<=A G E<=64} w_{h i j} \cdot H O U R L Y \_E A R N I N G S}{\sum_{P B 150=1 \text { andPL035=1 and } 16<=A G E<=64} w_{h i j}}
$$

now we estimate the variance of $R=\frac{R 1}{R 2}$ using the following formulas.

For $\hat{R} 1$ and $\hat{R} 2$, the variances $V(\hat{R} 1)$ and $V(\hat{R} 2)$ are calculated using

$$
\begin{equation*}
V(\hat{R} 1)=\frac{V(\hat{Y})+\hat{R} 1^{2} \cdot V(\hat{X})-2 \cdot \hat{R} 1 \cdot \operatorname{Cov}(\hat{Y}, \hat{X})}{\hat{X}^{2}} \tag{18}
\end{equation*}
$$

(the same formula applies also for $R 2$ using the relevant data for men)
where
$\operatorname{Cov}\left(\widehat{Y}_{h}, \hat{X}_{h}\right)=\frac{1}{n_{h \cdot\left(n_{h}-1\right)}} \cdot\left[\sum_{i=1}^{n_{h}} T_{h i} \cdot F_{h i}-\frac{1}{n_{h}} \cdot\left(\sum_{i=1}^{n_{h}} T_{h i}\right)\left(\sum_{i=1}^{n_{h}} F_{h i}\right)\right]$ (19)
and

$$
\operatorname{Cov}(\hat{Y}, \hat{X})=\sum_{h} \operatorname{Cov}\left(\widehat{Y}_{h}, \widehat{X}_{h}\right)(20)
$$

Finally, $V(\hat{R})=V(\hat{R} 1 / \hat{R} 2)=\left(\frac{R 1}{R 2}\right)^{2} .\left(C_{\hat{R} 1 \hat{R} 1}+C_{\hat{R} 2 \hat{R} 2}-2 \cdot C_{\hat{R} 1 \hat{R} 2}\right)(21)$
where
$C_{\hat{R} 1 \hat{R} 1}=\frac{V(\hat{R} 1)}{R 1^{2}}{ }_{(22)}$
$C_{\hat{R} 2 \hat{R} 2}=\frac{V(\hat{R} 2)}{R 2^{2}}(23)$
$C_{\hat{R}_{1} \hat{R} 2}=C_{\hat{Y}_{1} \hat{Y}_{2}}+C_{\hat{X}_{1} \hat{X}_{2}}-C_{\hat{Y}_{1} \hat{X}_{2}}-C_{\hat{Y}_{2} \hat{X}_{1}(24)}$
and

$$
\begin{align*}
& C_{\hat{Y}_{1} \hat{Y}_{2}}=\frac{\operatorname{Cov}\left(\hat{Y}_{1}, \hat{Y}_{2}\right)}{\hat{Y}_{1} \hat{Y}_{2}} \\
& C_{\hat{X}_{1} \hat{X}_{2}}=\frac{\operatorname{Cov}\left(\hat{X}_{1}, \widehat{X}_{2}\right)}{\widehat{X}_{1} \widehat{X}_{2}} \\
& C_{\hat{Y}_{1} \hat{X}_{2}}=\frac{\operatorname{Cov}\left(\hat{Y}_{1}, \widehat{X}_{2}\right)}{\hat{Y}_{1} \widehat{X}_{2}}  \tag{27}\\
& C_{\hat{Y}_{2} \hat{X}_{1}}=\frac{\operatorname{Cov}\left(\hat{Y}_{2}, \hat{X}_{1}\right)}{\hat{Y}_{2} \widehat{X}_{1}} \tag{28}
\end{align*}
$$

All the above covariances (25) to (28) are calculated with the use of the formulas (19) and (20) and the relevant variables of women and men respectively.

The same procedure and formulas applied for unadjusted gender pay gap was also used in the case of the indicator "Inequality of income distribution S80/S20 income quintile share ratio". For all other indicators, expressed as ratios, formulas (18) - (20) were used.

### 2.2.2 Standard Error and Effective Sample Size

Standard errors for all the required indicators were calculated in the form of coefficient of variation (CV).

For an estimate $\hat{Y}$, the coefficient of variation is defined as:

$$
\begin{equation*}
C V(\hat{Y})=\frac{\sqrt{V(\hat{Y})}}{\hat{Y}} * 100 \tag{29}
\end{equation*}
$$

Effective sample size was calculated as the ratio of the actual sample size to the design effect. The design effect was calculated as the ratio of the variance estimate produced for two-stage stratified sampling to the variance estimate produced under the assumption of simple random sampling.

The variance estimates under the assumption of simple random sampling were calculated using the formulas presented below. Concerning the symbolisms used in the formulas, the logic is the same as in the formulas for two-stage stratified sampling .

The variance estimator for $\hat{Y}$ and $\hat{X}$ yields respectively from (30) and (31):

$$
\begin{equation*}
\operatorname{Var}(\hat{Y})=\frac{N(N-n)}{n(n-1)} \cdot\left[\sum_{i=1}^{n} y_{i}^{2}-\frac{\left(\sum_{i=1}^{n} y_{i}\right)^{2}}{n}\right] \tag{30}
\end{equation*}
$$

$\operatorname{Var}(\hat{X})=\frac{N(N-n)}{n(n-1)} \cdot\left[\sum_{i=1}^{n} x_{i}^{2}-\frac{\left(\sum_{i=1}^{n} x_{i}\right)^{2}}{n}\right]$
The variance estimator for ratios, e.g. $\hat{R} 1$ (ratios are defined as in two-stage stratified sampling) is as follows:
$\operatorname{Var}(\widehat{R} 1)=\frac{1}{\widehat{X}^{2}} \cdot \frac{N(N-n)}{n} \cdot\left[S_{y}^{2}+R^{2} \cdot S_{x}^{2}-2 \cdot R \cdot \operatorname{Cov}(Y, X)\right](32)$
where:
$S_{y}^{2}=\frac{1}{n-1} \cdot\left[\sum_{i=1}^{n} y_{i}^{2}-\frac{\left(\sum_{i=1}^{n} y_{i}\right)^{2}}{n}\right](33), S_{x}^{2}=\frac{1}{n-1} \cdot\left[\sum_{i=1}^{n} x_{i}^{2}-\frac{\left(\sum_{i=1}^{n} x_{i}\right)^{2}}{n}\right]$
and

$$
\begin{equation*}
\operatorname{Cov}(Y, X)=\frac{1}{n-1} \cdot\left[\sum_{i=1}^{n} y_{i} \cdot x_{i}-\frac{\left(\sum_{i=1}^{n} y_{i}\right) \cdot\left(\sum_{i=1}^{n} x_{i}\right)}{n}\right] \tag{35}
\end{equation*}
$$

Finally, the coefficient of variation for "unadjusted gender pay gap" and "Inequality of income distribution S80/S20 income quintile share ratio" is calculated using the formulas (21) to (28) presented above.

In the table that follows the CV, the design effect, the actual sample size and the effective sample size are presented for all required indicators.

## Table 2: Standard errors

| INDICATOR | CV | Design Effect | Actual Sample Size | Effective Sample Size |
| :---: | :---: | :---: | :---: | :---: |
| At-risk-of-poverty rate (after social transfers) | 3.3\% | 4.7 | 16,849 | 3,585 |
| At-risk-of-poverty rate by age and gender | 3.3\% | 4.7 | 16,849 | 3,585 |
| At-risk-of-poverty rate by age and gender (female_0-15) | 7.6\% | 1.8 | 1,400 | 778 |
| At-risk-of-poverty rate by age and gender (female_16-24) | 7.2\% | 1.5 | 972 | 648 |
| At-risk-of-poverty rate by age and gender (female 25-49) | 5.0\% | 1.6 | 3,033 | 1,896 |
| At-risk-of-poverty rate by age and gender (female_50-64) | 6.1\% | 1.4 | 1,481 | 1,058 |
| At-risk-of-poverty rate by age and gender (female_>=65) | 4.1\% | 1.2 | 1,806 | 1,505 |
| At-risk-of-poverty rate by age and gender (female_>=16) | 3.2\% | 2.0 | 7,292 | 3,646 |
| At-risk-of-poverty rate by age and gender (female_16-64) | 4.0\% | 2.0 | 5,486 | 2,743 |
| At-risk-of-poverty rate by age and gender (female 0-64) | 4.0\% | 2.6 | 6,886 | 2,648 |
| At-risk-of-poverty rate by age and gender (male 0-15) | 7.7\% | 2.0 | 1,406 | 703 |
| At-risk-of-poverty rate by age and gender (male 16-24) | 8.0\% | 1.7 | 923 | 543 |
| At-risk-of-poverty rate by age and gender (male 25-49) | 5.5\% | 1.6 | 2,888 | 1,805 |
| At-risk-of-poverty rate by age and gender (male 50-64) | 6.3\% | 1.3 | 1,481 | 1,139 |
| At-risk-of-poverty rate by age and gender (male $>=65$ ) | 5.0\% | 1.2 | 1,459 | 1,216 |
| At-risk-of-poverty rate by age and gender (male $>=16$ ) | 3.8\% | 2.2 | 6,751 | 3,069 |
| At-risk-of-poverty rate by age and gender (male 16-64) | 4.5\% | 2.2 | 5,292 | 2,405 |
| At-risk-of-poverty rate by age and gender (male 0-64) | 4.5\% | 2.9 | 6,698 | 2,310 |
| At-risk-of-poverty rate by age and gender (0-15) | 6.1\% | 2.4 | 2,806 | 1,169 |
| At-risk-of-poverty rate by age and gender (16-24) | 5.7\% | 1.8 | 1,895 | 1,053 |
| At-risk-of-poverty rate by age and gender (25-49) | 4.8\% | 2.7 | 5,921 | 2,193 |
| At-risk-of-poverty rate by age and gender (50-64) | 5.4\% | 2.0 | 2,962 | 1,481 |
| At-risk-of-poverty rate by age and gender ( $>=65$ ) | 3.9\% | 1.9 | 3,265 | 1,718 |
| At-risk-of-poverty rate by age and gender (>=16) | 3.3\% | 3.8 | 14,043 | 3,696 |
| At-risk-of-poverty rate by age and gender (16-64) | 4.0\% | 3.7 | 10,778 | 2,913 |
| At-risk-of-poverty rate by most frequent activity status and gender | 3.3\% | 3.7 | 13,784 | 3,725 |
| At-risk-of-poverty rate by most frequent activity status and gender (female_employed) | 7.5\% | 1.9 | 2,473 | 1,302 |
| At-risk-of-poverty rate by most frequent activity status and gender (female_unemployed) | 9.4\% | 1.4 | 390 | 279 |
| At-risk-of-poverty rate by most frequent activity status and gender (female_retired) | 4.7\% | 1.2 | 1,379 | 1,149 |
| At-risk-of-poverty rate by most frequent activity status and gender (female_other inactive) | 4.0\% | 1.6 | 2,919 | 1,824 |


| INDICATOR | CV | Design Effect | Actual Sample Size | Effective Sample Size |
| :---: | :---: | :---: | :---: | :---: |
| At-risk-of-poverty rate by most frequent activity status and gender (male_employed) | 5.4\% | 1.9 | 3,892 | 2,048 |
| At-risk-of-poverty rate by most frequent activity status and gender (male_unemployed) | 10.3\% | 1.5 | 266 | 177 |
| At-risk-of-poverty rate by most frequent activity status and gender (male_retired) | 4.9 | 1.2 | 1,749 | 1,458 |
| At-risk-of-poverty rate by most frequent activity status and gender (male other inactive) | 7.8 | 1.7 | 716 | 421 |
| At-risk-of-poverty rate by most frequent activity status and gender (employed) | 5.4 | 2.9 | 6,365 | 2,195 |
| At-risk-of-poverty rate by most frequent activity status and gender (unemployed) | 7.6 | 1.8 | 656 | 364 |
| At-risk-of-poverty rate by most frequent activity status and gender (retired) | 4.1 | 1.7 | 3,128 | 1,840 |
| At-risk-of-poverty rate by most frequent activity status and gender (other inactive) | 4.0 | 1.9 | 3,635 | 1,913 |
| At-risk-of-poverty rate by household type | 3.3 | 4.7 | 16,821 | 3,579 |
| At-risk-of-poverty rate by household type (one person) | 4.7 | 1.2 | 1,297 | 1,081 |
| At-risk-of-poverty rate by household type (2 ad, both<65, no dep children) | 8.8 | 1.9 | 1,562 | 822 |
| At-risk-of-poverty rate by household type (2 ad, at least one $>65$, no dep children) | 5.2 | 2.1 | 2,076 | 989 |
| At-risk-of-poverty rate by household type (other, without dep children) | 9.3 | 5.6 | 3,342 | 597 |
| At-risk-of-poverty rate by household type (single parent, >=1dep children) | 14.8 | 3.8 | 277 | 73 |
| At-risk-of-poverty rate by household type ( $2 \mathrm{ad}, 1 \mathrm{dep}$ child) | 9.9 | 3.3 | 1,806 | 547 |
| At-risk-of-poverty rate by household type (2 ad, 2 dep children) | 7.8 | 6.2 | 3,100 | 500 |
| At-risk-of-poverty rate by household type ( $2 \mathrm{ad},>=3$ dep children) | 11.2 | 1.2 | 1,088 | 907 |
| At-risk-of-poverty rate by household type (other, with dep children) | 10.9 | 6.3 | 2,273 | 361 |
| At-risk-of-poverty rate by household type (without dep children) | 4.0 | 3.4 | 8,277 | 2,434 |
| At-risk-of-poverty rate by household type (with dep children) | 5.1 | 5.5 | 8,544 | 1,553 |
| At-risk-of-poverty rate by accomodation tenure status | 3.3 | 4.7 | 16,849 | 3,585 |
| At-risk-of-poverty rate by accomodation tenure status (owner or rent free) | 3.6 | 4.5 | 13,923 | 3,094 |
| At-risk-of-poverty rate by accomodation tenure status (tenant) | 7.7 | 4.8 | 2,926 | 610 |
| At-risk-of-poverty rate by work intensity of the household | 3.9 | 4.9 | 14,475 | 2,954 |
| At-risk-of-poverty rate by work intensity of the household (without dep children WI=0) | 7.4 | 2.5 | 1,120 | 448 |
| At-risk-of-poverty rate by work intensity of the household (without dep children_0<WI<1) | 9.5 | 4.8 | 3,089 | 644 |
| At-risk-of-poverty rate by work intensity of the household (without dep children_WI=1) | 13.4 | 3.8 | 1,816 | 478 |
| At-risk-of-poverty rate by work intensity of the household (with dep children_WI=0) | 11.8 | 5.0 | 309 | 62 |
| At-risk-of-poverty rate by work intensity of the household (with dep children_0<WI<0.5) | 10.8 | 4.8 | 712 | 148 |
| At-risk-of-poverty rate by work intensity of the household (with dep children_ $0.5<\mathrm{W}<1$ ) | 6.9 | 5.2 | 4,089 | 786 |
| At-risk-of-poverty rate by work intensity of the household (with dep children_WI=1) | 11.8 | 5.9 | 3,340 | 566 |
| Inequality of income distribution S80/S20 income quintile share ratio | 4.2 | 4.4 | 6,738 | 1,531 |


| INDICATOR | CV | Design Effect | Actual Sample Size | Effective Sample Size |
| :---: | :---: | :---: | :---: | :---: |
| Dispretion around the at-risk-of-poverty threshold (ARPT40\%) | 5.7 | 4.5 | 16,849 | 3,744 |
| Dispretion around the at-risk-of-poverty threshold (ARPT50\%) | 4.3 | 4.5 | 16,849 | 3,744 |
| Dispretion around the at-risk-of-poverty threshold (ARPT70\%) | 2.7 | 4.6 | 16,849 | 3,663 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits | 3.1 | 4.8 | 16,849 | 3,510 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (female 0-15) | 7.2 | 1.8 | 1,400 | 778 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (female 16-64) | 3.8 | 2.1 | 5,486 | 2,612 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (female_>=65) | 3.6 | 1.2 | 1,806 | 1,505 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (female_>=16) | 3.0 | 2.1 | 7,292 | 3,472 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (male_0-15) | 7.2 | 2.0 | 1,406 | 703 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (male 16-64) | 4.2 | 2.3 | 5,292 | 2,301 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (male >=65) | 4.6 | 1.2 | 1,459 | 1,216 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (male >=16) | 3.5 | 2.3 | 6,751 | 2,935 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (0-15) | 5.7 | 2.4 | 2,806 | 1,169 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (16-64) | 3.7 | 4.0 | 10,778 | 2,695 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (>=65) | 3.5 | 1.8 | 3,265 | 1,814 |
| At-risk-of-poverty rate before social transfers by age and gender_ except old age and survivors benefits (>=16) | 3.0 | 3.9 | 14,043 | 3,601 |
| At-risk-of-poverty rate before social transfers by age and gender_including old age and survivors benefits | 2.0 | 4.7 | 16,849 | 3,585 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (female 0-15) | 6.9 | 1.9 | 1,400 | 737 |


| INDICATOR | CV | Design Effect | Actual Sample Size | Effective Sample Size |
| :---: | :---: | :---: | :---: | :---: |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (female 16-64) | 2.8 | 2.2 | 5,486 | 2,494 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (female >=65) | 1.1 | 1.3 | 1,806 | 1,389 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (female >=16) | 1.8 | 2.1 | 7,292 | 3,472 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (male 0-15) | 7.0 | 2.0 | 1,406 | 703 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (male 16-64) | 3.2 | 2.4 | 5,292 | 2,205 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (male >=65) | 1.4 | 1.3 | 1,459 | 1,122 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (male >=16) | 2.2 | 2.3 | 6,751 | 2,935 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (0-15) | 5.4 | 2.4 | 2,806 | 1,169 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (16-64) | 2.8 | 4.0 | 10,778 | 2,695 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (>=65) | 1.0 | 1.7 | 3,265 | 1,921 |
| At-risk-of-poverty rate before social transfers by age and gender including old age and survivors benefits (>=16) | 1.9 | 3.9 | 14,043 | 3,601 |
| Gini Coefficient (inequality of income distribution) | 1.2 | 10.6 | 16,849 | 1,590 |
| Mean Equivalised disposable income | 1.5 | 2.6 | 6,252 | 2,405 |
| Unadjusted gender pay gap | 1.9 | 1.0 | 3,989 | 3,989 |

- Following doc.EU-SILC 131-rev/04, and more specifically according to the notice 4 in page 11 "people age -1 will be taken into account in the calculation of Female/males age . 0 ". According to the SAS program for the calculation of indicators the pre-mentioned people haven't been included. Hence, a difference of 44 persons is present in the table.
- For indicator on relative median at-risk-of poverty gap by age and gender, standar errors haven't been calculated because this indicator is being calculated by constant values hence no variance exists.


### 2.3. Non- sampling errors

### 2.3.1 Sampling frame and coverage errors

EU-SILC is a household survey and, as it has already been mentioned, is carried out by applying the two-stage stratified sampling with Primary Sampling Unit (PSU) the area (one or more building blocks) and final unit the household. Thus, there are two frames used, which are:

1. the frame containing the PSUs (areas) and
2. the frame of households within the selected PSUs.

The frame of PSUs is updated every ten (10) years through the general population census. Concerning the frame of households, within each selected PSU this is updated before the selection of the sampling households used for data collection.

So, any coverage problems that may arise is more possible to relate with the frame of PSUs. However, any such problems are corrected with the use of the calibration procedure already described.

### 2.3.2 Measurement and processing errors

### 2.3.2.1. Measurement errors

Measurement errors can occur from the questionnaire, the interviewers and their training, the respondents, the routing, and the skills testing before starting the fieldwork.
(1) The questionnaire

For building up the questionnaires we adopted the proposed questionnaires of Eurostat as the basis (documents SILC055 and SILC065). The structure of the questionnaires is similar to these ones. The majority of the questions are almost literally copied and translated.

Also, in order to finalize the questionnaires, we took into account any observations we had made on the questionnaires of the previous years (pilot survey, EU-SILC 2003), together with the experience from the ECHP projects.

Mainly the parts of self-employment income and taxes have been differently formulated.

The questionnaire for the 2004 survey was the same as for 2003 survey, except some small changes in the wording of the tax concerning questions, in order to collect, in a better way, the tax payments or tax receipts.

Also, the tax adjustment period coincides with the survey conduction and respective tax amounts are not known.

Usually, during the survey conduction (March-May) the monthly salary raise for employees is not known yet, as it is realized almost at the end of June-July, hence the respondents cannot provide the exact income figures (PY200G).

The questions related to employee income, especially the part corresponding to supplementary income from illness, incapacity, maternity and survivor's didn't work at all due to its complexity and also due to the fact that the interviewees couldn't separate the amounts asked. Most of the times the specific amounts are already included in the salaries or pensions.

Another error found was the confusion of monthly and annual amounts for employee income.

Question for self-employeed on drawing money from work account for any non business purposes has been confused too.A slightly different wording and better explanation of the question gave better results.

Also in the rented income a problem encountered as persons saying that had zero profit (expenses equal income from renting property) then registered paid tax.

We cannot separate tax corresponding to income of year 2003 from tax corresponding to income of previous year paid in 2003, as we collected it together.

Another general problem concerns housewives having never worked but receiving pension from the agricultural insurance organization, which is a fact in Greece.
(2) The interviewers and their training.

It seems that still some interviewers don't use the exact wording of the questions. Others skipped questions, especially subjective ones (e.g. deprivation questions). Also, when the respondents didn't provide the figures the interviewers completed/imputed the figures themselves.

The question on the use of company car has also been missleading, as some interviewers obviously didn't ask it correctly resulting thus in collecting too many kilometers for personal use, adding both kilometers for personal and professional use.

All the interviewers attended a three days training course before starting the fieldwork. Three days training was both on the basic concepts of the survey and the questionnaire completion and on the use and completion of the electronic questionnaires. This since most of the interviewers had participated also in previous EU-SILC survey as well as in ECHP.

Two manuals were distributed and explained during the training:

- A general guideliness' manual containing information about the objectives of the survey, the organisation of the survey, legal and administrative aspects around the survey, fieldwork aspect (how to contact the household, how to introduce oneself, who answers which questions, time delays, ...) and the content and correct completion of the questionnaires.
- A second manual on the use of portable PCs for the EU-SILC Computer Assisted Personal Interviews and about the data entry program itself.

The respondents hesitate in providing income figures and in general deny to consult their tax return, in order to provide exact / correct amounts.

Income from interests, dividends in unincorporated businesses is in general not provided from the households, resulting thus in a significant underestimation of it.

There is a sense that still self-employment income has been under-estimated.

As far as the educational level is concerned, what has been often noticed is that, due to the fact that since the late 70 's both the lower secondary education and the upper secondary education were called "secondary education", for persons born before 1960 answers have been confused.

The National Statistical Service of Greece made several plausibility checks. Especially for income data lower and upper bounds of the range in which an amount of income was accepted were determined. These checks were carried out during the survey conduction, as the guidelines of the survey included such bounds for specific income data, and afterwards centrally by personnel of the NSSG. Whenever necessary. households were called back.

The mismatch in time between household composition and household income result in a number of inconsistencies. For example, persons having been working in year $\mathrm{N}-1$ but retired in year N , persons being students in year $\mathrm{N}-1$ and employed in year N , income in year N-1 from persons who died in year N , etc. may result in these inconsistencies representing though reality. In any case the pre-mentioned examples show both under and over reporting of income.
(4) Errors in the routing

No errors in the routing were made.
(5) Skills testing before starting the fieldwork

Interviewers were personnel of the National Statistical Service, experienced with other household surveys carried out by our institute, at a percentage of $90 \%$.

### 2.3.2.2. Processing errors

Greece used the CAPI- method to interview the persons. The electronic questionnaires were designed using Oracle -SQL.

Data entry controls

As pre-mentioned several plausibility checks have been made, using the validation rules of doc. 65.

Additionally, basic checks were made with the data entry programs. More specifically:

## Personal Register

- The specific child care programs were cross-checked with the age of the child. For example for a three years old child the interviewer could not register an answer to "number of hours spent per week in a program of obligatory educational level"


## Household Questionnaire

- In question 7 on tenure status, if there was an answer in "owned dwelling" or "rented for free" then there couldn't be registered a positive answer in question 21 on "arrears on mortgage or rent payments".
- In question 20 on "Capacity to afford paying for one week annual holiday away from home, have a meal with meat, chicken, fish every second year, etc." if a positive answer existed in all four items then in question 22 on "ability to make ends meet" a positive answer wasn't accepted in "with great difficulty".
- In question 23 on the existense in the household of a child aged less than 16, the program checked from the household register the ages and didn't allow for a wrong answer.
- In question 29 on social security benefits, and specifically for the social solidarity allowance for pensioners, up and down boundaries were inserted for the registration of the amount.


## Personal Questionnaire

- The age in question 2 was cross-checked with the educational level attended in question 7.
- The age in question 2 was cross-checked with the educational level attained in question 8 .
- Between questions 7 and 8 there was also made a cross-check, so that a person cannot attend a level of education being lower than the one having being finished.
- In questions 8 and 9 cross-check was made between the age at which the person finished a specific educational level and the specific educational level having been attained. The age couldn't be less than the usual age at which the level is attained.
- In question 11, a person suffering from a chronic illness or condition couldn't answer in question 10 that has "very good health"
- In question 19 on basic activity status all the answers were cross-checked with the answer provided in the personal register.
- A more complicated cross-check was made in year of birth (question 2), age first job was undertaken (question 47) and years spend as employee or self-employed (question 48).
- In question 47 a person couldn't answer "have never worked" if there exists a positive answer in question 19 "working full or part time" or answer "yes" in question 22 "Have you ever worked?".
- In question 116 on the $\mathrm{s} / \mathrm{n}$ of the member with which the respondent makes tax return, the $\mathrm{s} / \mathrm{n}$ of the respondent wasn't accepted.

In all the re-mentioned checks the cursor couldn't continue to the next answer and a special notice was written on the screen.

## Post-data entry checks

Several post data entry checks were made in the data. More specifically:

## Checks on the number of questionnaires expected to be collected

- Number of expected household questionnaires per area unit.
- Number of expected personal questionnaires per interviewed household.


## Checks on the data

- Checks and comparison of demographic data register in the Personal Register, with these of previous year.
- Check and comparison of citizenships and countries of birth with previous year.
- Codification of ISCO 88, NACE rev. 2 and citizenships, and checks with the wording.
- Checks on the number of split-off households.
- Checks on the completeness of income variables.
- Checks on education variables.
- Checks on existing members' tracing sheets.
(2) Codification

The codification of questions relating to occupation (ISCO), economic activity of the local unit (NACE), nationality was done by experienced personell according to ISCO-88, NACE rev. 2 and Doc 65/04.
(3) Other controls and other problems

Several plausibility checks have been made, many of them being the same as the ones SAS program does. During the data processing of raw-material ACCESS-2000 and SPSS has been used.

### 2.3.3. Non-response errors

### 2.3.3.1. Achieved sample size

Table 3: Number of households for which an interview is accepted for the database.

## Rotational group breakdown and total

| Rotational group | Households | \% |
| :---: | :---: | :---: |
| 3 | 1.666 | 23,2 |
| 2 | 1.665 | 23,2 |
| 4 | 1.693 | 23,6 |
| 1 | 2.151 | 30,0 |
| Total | $\mathbf{7 . 1 7 5}$ | $\mathbf{1 0 0 , 0}$ |

Table 4 : Number of persons of 16 years or older who are members of the households for which the interview is accepted for the database, and who completed a personal interview. Rotational group breakdown and total

| Rotational group | Households' members | \% |
| :---: | :---: | :---: |
| 2 | 3.418 | 24,4 |
| 3 | 3.495 | 25,0 |
| 4 | 3.557 | 25,4 |
| 1 | 3.526 | 25,2 |
| Total | $\mathbf{1 3 . 9 9 6}$ | $\mathbf{1 0 0 , 0}$ |

### 2.3.3.2 Unit non response

- Household non-response rates (NRh)
$\mathrm{NRh}=(1-(\mathrm{Ra} * \mathrm{Rh})) * 100$
where
$R a=\frac{\text { Number of addresses successfully contacted }}{\text { Number of valid addresses selected }}$
$=\frac{\sum[D B 120=11]}{\sum[D B 120=\text { all }]-\sum[D B 120=23]}=\frac{6.980}{7.175-70}=0,982407$
$R h=\frac{\text { Number of household interviews completed and accepted for the database }}{\text { Number of eligible households at contacted addresses }}=$
$=\frac{\sum[D B 135=1]}{\sum[D B 130=\text { all }]}=\frac{6.252}{6.980}=0,8957$
$\mathrm{NRh}=(1-0,982 * 0,896) * 100=12,013 \%$

So, the household non-response rate is $12,013 \%$

## - Individual non-response rates (NRp)

$\mathrm{NRp}=(1-(\mathrm{Rp}))^{*} 100$
Where
$R p=\frac{\text { Number of personal interview completed }}{\text { Number of eligible individuals }}$
$=\frac{13.996}{14.043}=0,9966$
$\mathrm{NRp}=(1-0,9966) * 100=0,34 \%$
So, the individual non-response rate is $0,34 \%$

## - Overall individual non-response rates (*NRp)

*NRp=(1-(Ra*Rh*Rp))*100= $(1-(0,983 * 0,896 * 0.997)) * 100=12,19 \%$

So, the overall individual non-response rate is $12,19 \%$
2.3.3.3 Distribution of households by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135)

Table 5: Distribution of households by 'record of contact at address' (DB120), by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135)

|  | Number of <br> households | \% |
| :--- | :---: | :---: |
| Total $(\mathrm{DB} 120=11$ to 23) | 7.066 | 100,0 |
| Address contacted (DB120 =11) | 6.980 | 98,8 |
| Address non-contacted (DB120 =21 to 23) | 86 | 1,2 |
| Total address non-contacted | 86 | 100,0 |
| Address cannot be located (DB120 =21) | 14 | 16,3 |
| Address unable to access $(\mathrm{DB} 120=22)$ | 2 | 2,3 |
| Address does not exist $(\mathrm{DB} 120=23)$ | 70 | 81,4 |

Table 6: Distribution of households by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135)

|  | Number of households | $\mathbf{\%}$ |
| :--- | :---: | :---: |
| Total | 6.980 | 100,0 |
| Household questionnaire completed (DB130 =11) | 6.252 | 89,6 |
| Interview not completed (DB130 $=21$ to 24) | 728 | 10,4 |
| Total interview not completed (DB130 =21 to 24) | 728 | 100,0 |
| Refusal to co-operate (DB130 =21) | 407 | 55,9 |
| Entire household temporarily away (DB130 =22) | 255 | 35,1 |
| Household unable to respond (DB130 =23) | 41 | 5,6 |
| Other reasons | 25 | 3,4 |
| Household questionnaire completed $(\mathrm{DB} 135=1+2)$ | 6.252 | 100,0 |
| Interview accepted for database $(\mathrm{DB} 135=1)$ | 6.252 | 100,0 |
| Interview rejected $(\mathrm{DB} 135=2)$ | - | - |

### 2.3.3.4. Distribution of substituted units

No substitution was applied in our survey

### 2.3.3.5. Item non response

For the income variables the initial item non-response was approximately $0,4 \%$. Mostly item non-response was observed in the self-employment income, however due to the limited percentage of non-response we decided to call back the households and their members in order to get the missing information. Hence, in our final data no items missing are included. Also, no imputation was made in the data as partial information didn't exist.

In the following table only the percentages of households (per income componets collected or compiles at household level)/ persons (per income components collected or compiled at personal level) having received an amount for each income component are presented.

Table 7: Item non response

| Item non-response | \% of households having received an amount |
| :---: | :---: |
| Total disposable household income | \% of households having received an amount |
| Total disposable household income (HY020) | 99,3 |
| Total disposable household income before social transfers except old-age and survivor's benefits (HY022) | 98,8 |
| Total disposable household income before social transfers including old-age and survivor's benefit (HY023) | 83,6 |
| Net income components at household level | \% of households having received an amount |
| Family related allowances (HY050N) | 10,7 |
| Interests, dividends, etc. (HY090N) | 5,6 |
| Net income components at household level | \% of households having received an amount |
| Income from rental of a property or land (HY040N) | 17,1 |
| Family related allowances (HY050N) | 10,7 |
| Social exclusion not elsewhere classified (HY060N) | 5,6 |
| Housing allowance (HY070) | 0,6 |
| Regular inter-household cash transfer received (HY080) | 8,6 |

Table 7: Item non response

| Net income components at household level | \% of households <br> having received an <br> amount |
| :--- | :---: |
| Income received by people aged < 16 (HY110) | 0,1 |
| Regular inter-household cash transfer paid <br> (HY130) | 10,3 |
| Net income components at personal level | \% of persons 16+ <br> having received an <br> amount |
| Employee cash or near cash income (PY010N) | 31,0 |
| Cash benefits or losses from self-employment <br> (PY050N) | 17,0 |
| Pension from individual private plans |  |
| (PY080N) | 0,4 |
| Unemployment benefits (PY090N) | 2,5 |
| Old age benefits (PY100N) | 22,7 |
| Survivor' benefits (PY110N) | 4,5 |
| Sickness benefits (PY120N) | 0,4 |
| Disability benefits (PY130N) | 1,4 |
| Education-related allowances (PY140N) | 0,1 |
| Gross monthly earnings for employees <br> (PY200G) | (PY, |

2.3.3.6. Total item non-response and number of observations in the sample at unit level of the common cross-sectional European Union indicators based on the crosssectional component of EU-SILC, for equivalised disposable income and for the unadjusted gender pay gap.
Table 8 : Item non-response and number of observations at unit level of the common cross-sectional European Union indicators, for equivalised disposable income and
for the unadjusted gender pay gap.

| Indicator | Actual sample <br> size | Effective <br> sample size | Non-response | Notes |
| :--- | :---: | :---: | :---: | :--- |
| Mean Equivalised <br> disposable income | $\mathbf{6 . 2 5 2}$ | $\mathbf{2 . 4 0 5}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> threshold : one <br> person household | $\mathbf{1 . 2 9 7}$ | $\mathbf{1 . 0 8 1}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> threshold : <br> household with 2 <br> adults and 2 <br> dependent children | $\mathbf{3 1 0 0}$ | $\mathbf{5 0 0}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> rate by age and <br> gender | $\mathbf{1 6 . 8 0 5}$ | $\mathbf{3 . 5 8 5}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> rate by most <br> frequent activity <br> and gender | $\mathbf{1 3 . 7 8 4}$ | $\mathbf{3 . 7 2 5}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> rate by household <br> type | $\mathbf{1 6 . 8 2 1}$ | $\mathbf{3 . 5 7 9}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> rate by household <br> type : Single <br> households | $\mathbf{1 2 9 7}$ | $\mathbf{1 . 0 8 1}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> rate by <br> tenure status | $\mathbf{1 6 . 8 4 9}$ | $\mathbf{3 . 5 8 5}$ | $\mathbf{0}$ |  |
| Risk of poverty <br> rate by work <br> intensity <br> of the household | $\mathbf{1 4 4 7 5}$ | $\mathbf{2 . 9 5 4}$ | $\mathbf{0}$ |  |

Table 8 : continued

| Indicator | Actual sample <br> size | Effective <br> sample size <br> (number of <br> persons) | Non- <br> response |  |
| :--- | :---: | :---: | :---: | :---: |
| Dispersion around <br> at risk poverty <br> threshold (ARPT <br> 40\%) | $\mathbf{1 6 . 8 4 9}$ | $\mathbf{3 . 7 4 4}$ | $\mathbf{0}$ | Notes |
| Dispersion around <br> at risk poverty <br> threshold (ARPT <br> $50 \%$ ) | $\mathbf{1 6 . 8 4 9}$ | $\mathbf{3 . 7 4 4}$ | $\mathbf{0}$ |  |
| Dispersion around <br> at risk poverty <br> threshold (ARPT <br> 70\%) | $\mathbf{1 6 . 8 4 9}$ | $\mathbf{3 . 6 6 3}$ | $\mathbf{0}$ |  |
| Risk-of-poverty <br> rate by age and <br> gender before all <br> transfers | $\mathbf{1 6 . 8 4 9}$ | $\mathbf{3 . 5 1 0}$ | $\mathbf{0}$ |  |
| Risk-of-poverty <br> rate <br> by age and gender <br> before all transfers <br> (including <br> pensions) | $\mathbf{1 6 . 8 4 9}$ | $\mathbf{3 . 5 8 5}$ | $\mathbf{0}$ |  |
| Relative median <br> risk-of-poverty <br> gap by age and <br> gender | $\mathbf{3 . 7 1 9}$ | $\mathbf{1 6 8 4 9}$ | $\mathbf{1 . 5 3 1}$ | $\mathbf{0}$ |
| S80/S20 quintile <br> share ratio | $\mathbf{3 . 9 8 9}$ | $\mathbf{3 . 9 8 9}$ | $\mathbf{0}$ |  |
| Gini coefficient |  | $\mathbf{0}$ |  |  |
| Gender pay gap |  |  | $\mathbf{0}$ |  |

(1) Following doc.EU-SILC 131-rev/04, and more specifically according to the notice 4 in page 11 "people age -1 will be taken into account in the calculation of Female/males age .0 ". According to the SAS program for the calculation of indicators the pre-mentioned people haven't been included. Hence, a difference of 44 persons is present in table 8, compared to table 2 presenting the standar errors.

### 2.4 Mode of data collection

Mostly, computer assisted personal interviewing (CAPI) technique has been used and more specifically face-to-face interviews with laptops. The other techniques used are the PAPI and CATI techniques, while the use of self-administered by the respondent technique is very limited.

- Distribution of household members aged 16 and over

In tables 9 and 10 the distributions of household members aged 16 and over by 'data status (RB250) and by 'type of interview' (RB260) are presented.

Table 9: Distribution of household members (RB245=1 ${ }^{\mathbf{1}}$ )

|  | Total | $\mathbf{R B 2 5 0}=\mathbf{1 1}^{\mathbf{2}}$ | $\mathbf{R B 2 5 0}=\mathbf{2 1}^{\mathbf{3}}$ | $\mathbf{R B 2 5 0}=\mathbf{2 3}^{\mathbf{4}}$ | $\mathbf{R B 2 5 0}=\mathbf{3 1}^{\mathbf{5}}$ | $\mathbf{R B 2 5 0}=\mathbf{3 2 ,}$ <br> $\mathbf{3 3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 14.043 | 13.996 | 8 | 9 | 27 | $2+1$ |
| $\%$ | 100,0 | 99,7 | 0,006 | 0,006 | 0,2 | 0,002 |

Table 10: : Distribution of household members ( RB260=1)

|  | Total | $\mathbf{R B 2 6 0}=\mathbf{1}^{\mathbf{6}}$ | $\mathbf{R B 2 6 0}=\mathbf{2}^{\mathbf{7}}$ | $\mathbf{R B 2 6 0}=\mathbf{3}^{\mathbf{8}}$ | $\mathbf{R B 2 6 0}=\mathbf{4}^{\mathbf{9}}$ | $\mathbf{R B 2 6 0}^{\mathbf{7}} \mathbf{5}^{\mathbf{1 0}}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Tota <br> 1 | 13.996 | 8.268 | 4.945 | 357 | 54 | 372 |
| $\%$ | 100,0 | 59,1 | 35,3 | 2,6 | 0,4 | 2,7 |

[^0]
### 2.5 Interview duration

Average interview duration per household: $60,3 \mathrm{~min}$. The average has been calculated according to the duration being registered in the questionnaires. We didn't always take into account the time needed for the data entry of the questionnaires in the computer (CAPI interview).

## 3. COMPARABILITY

### 3.1 Basic concepts and definitions

## The reference population

The reference population is all citizens officially living at Greek territory (population de facto). The source of our sample is the Census Population. This Census includes all private households and their current members residing in the territory, independently of any socioeconomic characteristics they may have. Persons living in collective households and in institutions are excluded from the target population, as well as households having members diplomatic missioners.

## The private household definition

The definition of household that Eurostat recommends is used. Household is defined as a person living alone or a group of people who live together in the same dwelling and share expenditures including the joint provision of the essentials of living.

## The household membership

All household members of 16 year and older at the time of the interview, are selected for a personal interview.

Subject to the further and specific conditions shown below, the following persons must if they share household expenses, be regharded as household members:

1. Persons usually resident, related to other members
2. Persons usually resident, not related to other members
3. Resident boarders, lodgers, tenants
4. Visitors
5. Line-in domestic servants, au-pairs
6. Persons usually resident, but temporarily absent from the dwelling (for reasons of holiday travel, work, education or similar)
7. Children of the household being educated away from home
8. Persons absent for long periods, but having household ties : persons working away from home
9. Persons temporarily absent but having household ties: persons in hospital, homes or other institutions

Further conditions for inclusion as household members are as follows:
(a) Categories 3,4, and 5:

Such persons must currently have no private address elsewhere; or their actual or intended duration of stay must be six months or more.
(b) Category 6 :

Such persons must currently have no private address elsewhere and their actual or intended duration of absence from the household must be less than six months.

## Category 7 and 8 :

Irrespective of the actual or intended duration of abasence, such persons must currently have no private address elsewhere, must be the partner or child of a household member and must continue to retain close ties with the household and must consider this address to be his/her main residence.
(c) Category 9:

Such person must have clear financial ties to the household and must be actually or prospectively absent from the household for less than six months.

## - Shares in household expenses

Share in household expensews include benefiting from expenses (e.g. children, persons wih no income) as well as contributing to expenses. If expenses are no shared, then the person constitutes separate household at the same address.

## - Usually resident

A person shall be considered as a usually resident member of the household if he/she spends most of his/her daily rest there, evaluated over the past six months. Persons forming new households or joining existing households shall normally be considered as members at their new location; similarly, those leaving to live elsewhere shall no longer be considered as members of the original household. The abovementioned 'past six month' criteria shall be replaced by the intention to stay for a period of six months or more at the new plave of residence.

## - Intention to stay for a period of six months or more

Account has to be taken of what may be considered as 'permanent' movements in or out of households. Thus a person who has moved into a household for an indefinite period or with theintention to stay for a period of six months or more shall be considered as a household member, even though the person has not yet stayed in the household for six months, and has in fact spent a majorityof that time at some other place of residence. Similarly, a person who has moved out of the household to some other place of residence with the intention of staying away for six months or more, shall no longer be considered as a member of the previous household.

## - Temporarily absent in private accommodation

If the person who is temporarily absent is in private accommodation, then whether he/she is a member of this (or other) hosehold depends on the length of the absence. Exceptionally, certain categories of persons with very close ties to the househld may be included as members irrespective of the length of absence, provided they are not considered members of another private household.

In the application of these criteria, the intention is to minimize the risk that individuals who have two private addresses at which they might potentially be enumerated are not doublecounted in the sampling frame. Similarly, the intention is to minimize the risk of some persons being excluded from membership of any household, even though in reality they belong to the private household sector.

## The income reference period used

The income reference period is a fixed twelve-month period, namely the previous calendar year. For SILC 2004; the income reference period is the year 2003.

The period for taxes on income and social insurance contributions
This is also fixed twelve-month period, namely the previous calendar year. For SILC 2004; the period is the year 2003.

## The reference period on taxes on wealth

The reference period on taxes on wealth is the previous calendar year.

The lag between the income reference period and current variables
The income reference period is the previous calendar year (year 2003) and the current variables refer to the fieldwork period (March-May 2004). Therefore the lag is at minimum 3 months and at maximum 5 months.

## Total duration of the data collection of the sample

The total duration is three months (March, April, May), every year.

Basic information on activity status during the income reference period
This information can be obtained by combining the answer for question 19 (PL030) with the answer for question 49 (calendar question).(PL210A—PL210K)

### 3.2 Components of income

### 3.2.1 Income definitions

## Total household gross income

$$
\begin{aligned}
& \text { HY010G }=\text { PY010G }+ \text { PY050G }+ \text { PY090G }+ \text { PY100G }+ \text { PY110G }+ \text { PY120G + PY130G + } \\
& \text { PY140G }+ \text { HY040G }+ \text { HY050G }+ \text { HY060G }+ \text { HY070G }+ \text { HY080G }+ \text { HY090G + HY110 G. }
\end{aligned}
$$

We collected gross income for approximately the $30 \%$ of income variables but we didn't calculate total household gross income, so this factor is zero in total disposable household income.

## Total household net income

$$
\begin{aligned}
& \text { HY010N }=\text { PY010N }+ \text { PY050N }+ \text { PY090N }+ \text { PY100N }+ \text { PY110N }+ \text { PY120N + PY130N + } \\
& \text { PY140N + HY040N + HY050N + HY060N + HY070N + HY080N + HY090N + HY110 N. }
\end{aligned}
$$

## Total disposable household income

## HY020 $=$ HY010 - HY145 - HY130

We didn't take count of HY120N, because this variable is not collected.

Total disposable household income, before social transfers other than old age and survivors' benefit

HY022 $=$ HY020 - PY090N + PY120N + PY130N + PY140N - HY050N - HY060N -
HY070N

Total disposable household income, before social transfers including old age and survivors' benefit

HY023 = HY020 - PY090N + PY120N + PY130N + PY140N + PY100N + PY110N -
HY050N - HY060N -HY070N.

## Imputed rent (HY030N)

Questions 8 or 9 (income ranges) of the household questionnaire. The respondent provides the figure and the interviewer checks the answer according to the rents prevailing in the specific area. However, we didn't count it in in the total disposable household income.

## Income from rental of property or land (HY040N)

Asked as Eurostat recommends. Income from rental of a property or land refers to the income received, during the income reference period, from renting a property (for example renting a dwelling -not included in the profit/loss of unincorporated enterprises-, receipts from boarders or lodgers, or rent from land) after deducting costs such as mortgage interest repayments, minor repairs, maintenance, insurance and other charges.

## Family/children related allowances (HY050N)

Family / children related allowance includes:

- Lifelong pension for mothers having more than 3 children
- Allowance for families having 3 children
- Allowance for families having more than 3 children
- Family allowances for public servants
- Incapacitated relatives care benefit
- Pregnancy-puerperal benefit
- Parental leave allowance
- Birth grant
- Marriage benefit (lump-sum)

The allowance for family public servants, the allowance for pregnancy-puerperal and the allowance for parental leave, if registered to the particular question, will not be included to the income of employees.

## Social exclusion payments not elsewhere classified (HY060N)

Social benefits in the function 'social exclusion not elsewhere classified include:

[^1]- Allowances to children under 16 years old who live in poor households (pre-school and school allowance)
- Allowance to repatriots
- Allowance to refugees
- Allowance to persons released from prison
- Allowance to drug-addicts and alcoholics
- Allowances to long-standing unemployed aged 45-65
- Allowance of social solidarity for pensioners
- Assistance to households having faced earthquake, flood, etc.


## Housing allowances (HY070N)

The housing allowances include:

- Benefits paid to bank clerks or public servants working in border areas, or to military servants
- Rent benefit, a means-tested transfer by a public authority to tenants, based on income
- Rent benefit, transfer by a public authority to households having faced an earthquake, flood, etc. independently of income
- Benefit to owner-occupiers: a means-tested transfer by a public authority to owneroccupiers to alleviate their current housing costs: in practice help with paying mortgages and/ or interest and/or rehabilitation subsidy and/or a building subsidy.
- Subsidy of interest rate for loans of first dwelling.

It excludes:

- Social housing policy organized through the fiscal system
- All capital transfers (in particular investment grants).


## Regular inter - household cash transfers received (HY080N)

Regular inter-household cash transfers received refer to regular monetary amounts received, during the income reference period, from other households or persons. More specifically, we asked for "alimony -compulsory or voluntary", "child support, for children residing away from home" and in general for any regular cash support.

## Interest, dividends, profit from capital investments in incorporated businesses (HY090N)

Interests, dividends, profits from capital investment in an unincorporated business refer to the amount of interest from assets such as bank accounts, certificates of deposit, bonds, etc, dividends and profits from capital investment in an unincorporated business, in which the person does not work, received during the income reference period less expenses incurred.

## Interest paid on mortgage (HY0100N)

Interest paid on mortgage refers is not collected

## Income received by people aged under 16 (HY0110N)

Income received by people aged under 16 is defined as the gross income received by all household members aged under sixteen during the income reference period. Income received from other household members for work in the family business is not included.

## Regular taxes on wealth (HY0120N)

Regular taxes on wealth refers to taxes that are payable periodically on the ownership or use of land buildings by owners. The regular taxes on wealth provided will be those paid during the income reference period.

## Regular inter-household transfers paid (HY0130N)

Regular inter-household cash transfers paid refer to regular monetary amounts paid, during the income reference period, to other households or persons. More specifically, we asked for "alimony -compulsory or voluntary", "child support, for children residing away from home" and in general for any regular cash support.

## Tax on income and social insurance contributions (HY0140N)

Tax on income refers to taxes on income, profits and capital gains. They are assessed on the actual or presumed income of individuals, households or tax-unit. They include taxes assessed on holdings of property, land or real estate when these holdings are used as a basis for estimating the income of their owners.

Taxes on income include :

- taxes on individual, household or tax-unit income (income from self-employment, property, entrepreneurship, pernsions, etc.) included taxes deducted by employers (pay-asyou earn taxes), other taxes at source and taxes on the income of owners of unincorporated enterprise paid during the income reference period.
- Tax reimbursement received during the income reference period related to tax paid for the income received during the income reference period or for income received in previous year. This value will be taken into account as a reduction of taxes paid.
- Any interest charged on arrears of taxes due and any fines imposed by taxation authorities.

Social insurance contributions refer to employees' and self-employed contributions paid during the income reference period to either mandatory government or employer-based insurance schemes (pension, health, etc.).

We have also taken into account of the money that people have received from the taxes or that people have paid to the taxes in 2003 (based on their incomes of the year 2002).

## Repayments/receipts for tax adjustments (HY0145N)

Repayments/receipts for tax adjustments refer to the money paid to/received from Taxes Authorities related to the income received.

## Cash or near-cash employee income (PY010N)

Employee cash or near cash income refers to the monetary component of the compensation of employees in cash payable by an employer on behalf of the employee to social insurance schemes or tax authorities.

Included are:

- Wages and salaries paid in cash for time worked or work done in main and any secondary or casual job(s).
- Overtime
- Commission and tips
- Piece rate payments
- Payments for fostering
- Profit sharing and bonuses
- Allowance for working in remote locations, for transport
- Remuneration for time not worked (e.g. holiday payments)
- Additional payments based on productivity
- Supplementary payments (e.g. thireenth month payment)
- Marriage allowance
- Allowance to the workers in the building constructions

Excluded are:

- Reimbursements made by the employer for work-related expenses (e.g. business travel)
- Severance and termination pay to compensate employees for employment ending before the employee has reached the normal retirement age for that job and redundancy payments - Allowances for purely work-related expenses such as those for travel and subsistence or for protective clothes
- Lump sum payments at the normal retirement date
- Union strike pay


## Non-cash employee income (PY020N)

Gross non-cash employee income includes only the company car and associated costs (e.g. car insurance, taxes and duties), provided for either private use or both private and work use.

Information on the following items has also been collected, but not included, for:

- Free of charge or contribution meals within working hours
- Reduced values for electicity, telephone, water etc
- Producted goods provided free of charge or with reduced price to employees.

However they haven't been counted in in the variable "non-cash employee income".

## Employers' social insurance contribution (PY 035N)

Information on the items has been collected, but not included.

## Cash profits or losses from self-employment (including royalties) (PY050N)

It includes:

- Net operating profit or loss accruing to working owners of, or partners in, an unincorporated enterprise, less interest on business loans.
- Royalties earned on writing, inventions, and so on not included in the profit/loss of unincorporated enterprises.
- Rentals from business buildings, vehicles, equipment, etc not included in the profit/loss of unincorporated enterprises, after deduction of related costs such as interest on associated loans, repairs and maintenance and insurance charges.


## Value of goods produced for own consumption (PY070N)

The value of goods produced for own consumption refers to the value of food and beverages produced and also consumed within the same household.

The value of goods produced for own consumption are calculated as the market value of goods produced deducting any expenses incurred in the production, not being though counted in in total income. The item however has not been included in the data files.

## Unemployment benefits (PY090N)

As unemployment benefits included are:

- Full unemployment allowance
- Partial unemployment allowance
- Early retirement for labour market reasons
- Allowance vocational training for unemloyers
- Reimbursement due to dismissal from work
- Seasonal unemployment benefit for persons seasonally working (e.g. actresses, musicians, building workers, hotel staff, etc.)
- Allowance for young persons aged 20-29 years
- Allowance of military service
- Placement, resettlement or rehabilitation benefit
- Any other benefit replacing in whole or in part income lost by a worker due to loss of gainful employment.


## Old-age benefit (PY100N)

Old age benefit includes:

- Old age pension from public sector
- Supplementary pension from public sector
- Early retirement pension due to resignation
- Care allowance
- Parallel pension from private sector (paid by the employer)
- Lumb sum due to retirement
- National resistance pension
- Any other old age benefit providing a replacement income when the aged person retires from the labour marker, or guarantee a certain income when a person has reached a prescribed age.


## Survivors' benefits (PY110N)

It includes:

- Old age pension from public sector
- Supplementary pension from public sector
- Parallel pension from private sector (paid by the employer)
- Orphans pension
- Pension of war victims


## Sickness' benefits (PY0120N)

Included are:

- Paid sick leave
- Benefit for working accidents
- Benefit for spa therapy, airing etc.
- Assistance for movement of sick persons


## Disability benefits (PY0130N)

Included are:

- Disability pension
- Benefit for persons with special needs
- Care allowance for incapacitated persons
- Care allowance for incapacitated children
- Nutriciont allowance for people suffering kidney's disease
- Any other cash benefit


## Education-related allowances (PY0140N)

It includes :

- Benefit received for participation in research programs
- Scholarships


## Gross monthly earnings from employees (PY0200G)

It refers to the monthly amount in the main job for employees. It includes usual paid overtime, tips, profit share, bonuses. Information on gross monthly earnings for employees has been used only for the calculation of gender pay gap.

### 3.2.2. Other definitions

## Capacity to face unexpected financial expenses (HS060)

According to the guidelines the households were asked if the had financial difficulties facing unexpected but necessary expenses, such as the repair or replacement of a durable good, as the refridgerator, the washing machine, the car, etc. No specific amount was defined.

### 3.2.3. Variables not being collected but imputed

## Company car assessment (PY020)

The benefit for individuals of using a company car for private goals was not directly assessed at the interview but afterwards calculated by applying the depreciation method.

According to doc. EU-SILC 130/04 the main idea of the method was to impute to the employee the amount the recipient would have to pay over the reference period to enjoy the same benefit from the use of own vehicle.

More specifically:

Depreciation $=($ Purchase prices - selling prices at X$) / \mathrm{X}$,

Where X is the average age of a company car.

To calculate the "purchase price" and the "selling price", the make, the model, the registration year and other characteristics of the car have been used. A list of prices or manufactorer's recommended retail prices have been used for a wide range of new cars. If a specific type of car was not included in the list, the RRP has been available from the manufacturer's website. If a RRP was not available in the country, then it was estimated based on the price of a similar car or the price relative to other cars in the country with the similar pricing structure. The list price included VAT and vehicle registration tax. For calculating the "average age of a company car" an average of 5 has been considered.

## Housing cost (HH070)

This term housing cost refers to monthly costs connected with the households right to live in the accommodation. The costs of utilities (water, electricity, gas and heating) resulting from the actual use of the accommodation are also included.

The housing cost in the EU-SILC survey was estimated by a linear model. In detail, the parameters of the linear model were estimated using data from H.B.S. The independent variables that were used were: Actual rent paid, utility bills, repairs and other expenses, mantatory services and charges, mortgage interest payments.

The estimated linear model was applied to the data of EU-SILC producing estimates of the housing cost, of similar households.

### 3.2.4. The source or procedure used for the collection of income variables

All income variables were collected by interview

### 3.2.5. The form in which income variables at component level have been obtained.

(e.g. gross, net of taxes on income at source and social contributions, net of tax on income at source, net of social contributions)

Table 1: The form in which income variables at component level have been obtained

| Target variable | $\begin{gathered} \text { Variable } \\ \text { name } \end{gathered}$ | Unit of measurement | Gross | Net of taxes on income at source and social contributions | Net and grooss | Net of taxes on income at source | Net of social contributions | How the amount is recorded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employee Cash or near cash Income in reference period | PY010 | Individual level | - | 77,5\% | 22,5\% | - | - | Net |
| Non-Cash Employee income (company car) | PY020 | Individual level | Imputation |  |  |  |  | Net |
| Net Cash Income benefits/Losses from self-employment (including profit/loss from unincorporated enterprise, royalties | PY050 | Individual level | 3,1 | 89,8 | - | 2,4 | 4,7 | Net |
| Property income (Regular pension from Private (nonESSPROS) schemes)) | PY080 | Household level | - | 16,7 | 16,7 | - | - | Net |
| Unemployment Benefits | PY090 | Individual level | - | 100,0 | - | - | - | Net |
| Old-age benefits | PY100 | Individual level | 1,7 | 96,7 | - | 1,1 | 0,5 | Net |

(1) Some of them were unknown.

Table 1. The form in which income variables at component level have been obtained

| Target variable | Variable name | Unit of measurement | Gross | Net of taxes on income at source and social contributions | Net and grooss | Net of taxes on income at source | Net of social contributions | How the amount is recorded |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Survivor's Benefits | PY110 | Individual level | 1,4 | 96,6 | - | - | - | Net |
| Sickness Benefits | PY120 | Individual level | - | 100,0 | - | - | - | Net |
| Invalidity Benefits | PY130 | Individual level | - | 100,0 | - | - | - | Net |
| Education-related Allowances | PY140 | Individual level | - | 100,0 | - | - | - | Net |
| Income from rental of a property or land | HY040 | Household level | 8,0 | 55,1 | - | 33,1 | 3,8 | Net |
| Family/children ralated allowances | HY050 | Household level | 0 | 66,4 | - | 1,6 | 26,5 | Net |
| Social exclusion not elsewhere classified | HY060 | Household level | 0 | 100,0 | - | - | - | Net |
| Housing allowances | HY070 | Household level | 0 | 100,0 | - | - | - | Net |
| Regular interhousehold cash transfer received | HY080 | Household level | 12,1 | 87,9 | - | - | - | Net |
| Net interest, dividends, profit from capital investments in unicorporated business | HY090 | Household level | 31,3 | - | - | 68,7 | - | Net |
| Income received by people aged under 16 | HY110 | Household level | 0 | 100,0 | - | - | - | Net |
| Regular interhousehold cash transfer paid | HY130 | Household level | 27,6 | 72,4 | - | - | - | Net |

### 3.2.6. The method used for obtaining income target variables in the required form.

Only net amounts are obtained and sent. However, this year (2006) we plan to design a model on net-gross and gross-net conversion of all income variables, also being the target aim of the survey.

## 4. COHERENCE

### 4.1. General comments

Concerning the differences that turned up in the results of the survey 2004 comparing to the results of the survey of 2003, we have to note that:

- The population totals that they were used in 2003 survey for the weighting factors were based on the census of 2001.
- On the other hand, the population totals that they were used in 2004 survey for the weighting factors were projections of the census of 2001 to 2004.

Therefore, the above differences can be justified by this change in the population totals.

### 4.2 Comparison of structural indicators from EU-SILC 2004 and HBS 2004.

- The risk-of-poverty indicator has been calculated from the HBS 2004 data and has been found to be the same as the one of EU-SILC 2004, being approximately $20 \%$.
- The poverty threshold is $5.300 €$, while according to the HBS 2004 data it is $5.430 €$.
- Also, indicator S80/S20 is 6, while for the HBS 2004 it has been estimated to 5,9. Gini indicator is 33,1 and 33,7 , respectively.

We note that for the Household Budget Survey the pre-mentioned indicators have been estimated from comsumer expenditure and not from income.

### 4.3. Comparison of income target variables and number of persons who receive income from each "income component', with external sources.

Table 1. Comparison of income target variables and number of persons who receive income from each 'income component', with external sources.

| Income component | Number of persons who receive from income component in survey data | Number of persons who receive from income component in administrative data | Notes |
| :---: | :---: | :---: | :---: |
| Employee cash or near cash Income in reference period | 2.414.718 | 1.919.333 (Administrative data from tax returns)* | The difference can be attributed either to farmers working with salaries/wages or to persons also working part time in secondary jobs and do not declare their income or to illegal immigrants not making tax return at all. |
| Non-cash Employee income (company car) | 27.448 | 27.405 (HBS 2004) |  |
| Net Cash Income benefits/Losses from self-employment (including profit/loss from unincorporated enterprise, royalties | 1.479.365 | 1.388.350 (Administrative data from tax returns) | The small difference is attributed to selfemployeed with low income legally not making tax return. |

Table 1. Comparison of income target variables and number of persons who receive income from each "income component', with external sources.

| Income component | $\begin{array}{l}\text { Number of households } \\ \text { that receive from } \\ \text { income component in } \\ \text { survey data }\end{array}$ | $\begin{array}{l}\text { Number of households } \\ \text { that receive from } \\ \text { income component in } \\ \text { administrative data }\end{array}$ | Notes |
| :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { Property income } \\ \text { (Regular pension } \\ \text { from Private (non- } \\ \text { ESSPROS) } \\ \text { schemes)) }\end{array}$ |  | $\begin{array}{rl}1.218 \text { (HBS 2004) }\end{array}$ | $\begin{array}{l}\text { According to } \\ \text { information from } \\ \text { private insurance } \\ \text { companies the number } \\ \text { is estimated to }\end{array}$ |
| approximately 1200 |  |  |  |$\}$

Table 1. Comparison of income target variables and number of persons who receive income from each "income component', with external sources.

| Income component | Number of households that receive from income component in survey data | Number of households that receive from income component in administrative data | Notes |
| :---: | :---: | :---: | :---: |
| Income from rental of a property or land | 685.515 | $\begin{gathered} 522.687 \\ \text { (Administrative data } \\ \text { from tax returns) } \end{gathered}$ | The difference is attributed to the fact that rents for land or shops in small villages are often not declared in the tax return. |
| Family/children ralated allowances | 353.860 | 341.478 (administrative data) |  |
| Social exclusion not elsewhere classified | 206.601 | $\begin{aligned} & 264.634 \text { (administrative } \\ & \text { data)* } \end{aligned}$ | The difference is attributed to the fact that many social exclusion benefits concern fringe groups, not being easily <br> declared in the survey. |
| Housing allowances | 26.136 | 50.000 (administrative data)* | The administrative data are considered as more reliable. |
| Net interest, dividends, profit from capital investments in unicorporated business | 93.042 | 48.111 (HBS 2004) | No administrative data available |
| Income received by people aged under 16 | 1.926 | No data available | No administrative data available |
| Regular interhousehold cash transfer paid | 399.000 | 575.505 (HBS 2004) | No administrative data available |
| Regular interhousehold cash transfer received | 330.250 | 380.625 (HBS 2004) | No administrative data available |

## - Mean equivalized income

The annual mean equivalized income of 2003 was calculated in the survey in 10.185,69 euro and from the Bank of Greece the respective amount (not including rural areas) was found to be $11.527,77$ euro.

- Family allowances

We made comparisons for household family allowances, with administrative data and we found out that as far as the, only the $75 \%$ of it has been recorded (note that in previous year it has been recorded only the $60 \%$ of it ). As far as the is concerned approximately $80 \%$ of it has been recorded ((note that in previous year it has been recorded only the $70 \%$ of it). Data on the allowance for the $3^{\text {rd }}$ child have been imputed, since we had information from the household's register on children aged less than 6 residing in it. ( see Table 1.)

Table 2: Family allowances

| Family allowances | Number of persons <br> that received the <br> family allowances in <br> survey data | Number of persons received the <br> family allowances in <br> administrative data |
| :--- | :---: | :---: |
| Pensions for mothers <br> having more than 3 <br> children | 149799 |  |
| Allowance for mothers <br> having more than 3 <br> children | 49238 | 5189732 |
| Allowance for the 3 <br> child | 71932 | 89916 |

## - Unemployment benefit

Comparisons have been made for "full unemployment benefit" with administrative data, it was found to be good-estimated. The population that it had been estimated in the survey

## - Social solidarity for pensioners

As far as the social solidarity benefit for pensioners is concerned, according to administrative data 223.000 persons received it in 2003, while from the survey the relative number is 206.000 persons.

## - ESPROSS

In general, deviations from ESPROSS's data are accepted and are attributed to the fact that ESPROSS's data are from administrative data while the other are from a sample of households.

### 4.5. Comparison of other quality target variables

Below are presented tables proving that the most quality target variables are in coherense with variables collected from other surveys (LFS, HBS) making thus the survey robust.

- Variable PL030: "Self-defined current activity status"

| Variable PL030: <br> "Self-defined current <br> activity status" | HBS 2004-2005 | EU-SILC 2004 | LABOUR FORCE <br> SURVEY B' <br> QUARTER 2004 |
| :---: | :---: | :---: | :---: |
| Basic activity | $\mathbf{\%}$ | $\%$ | \% |
| At work | 44,10 | 46,68 | 47,81 |
| Unemployed | 4,11 | 5,14 | 5,44 |
| Non economically <br> active | 51,79 | 48,18 | 46,75 |

- Variable PL060: "Number of hours usually worked per week in main job"

| Variable PL060 | EU-SILC 2004 | LABOUR FORCE SURVEY B' <br> QUARTER 2004 |
| :--- | :---: | :--- |
| Number of hours <br> usually worked per <br> week in main job | 42 |  |
|  |  | 43 |

- Variable PL150: "Managerial position"

Since this is a rare characteristic in both surveys (EU-SILC and ECHP) the estimation is not accurate.

- Variable PL130: "Number of persons working in the local unit"

| Variable PL130: <br> Number of persons <br> working in the local <br> unit | EU-SILC 2004 | LABOUR FORCE SURVEY B' <br> QUARTER 2004 |
| :--- | :---: | :---: |
| $1-10$ persons | 59,0 | 53,4 |
| $11-19$ persons | 12,6 | 10,2 |
| $20-49$ persons | 9,0 | 7,3 |
| 50 persons or more | 14,0 | 10,6 |
| Don't know but fewer <br> that 11 persons | 1,5 | 5,2 |
| Don't know but more <br> than 10 persons | 3,9 | 7,3 |

- PL040 : "Status in employment"

| PL040 : "Status in <br> employment | HBS 2004-2005 | EU-SILC 2004 | LABOUR FORCE <br> SURVEY B" <br> QUARTER 2004 |
| :--- | :---: | :---: | :---: |
| Status in employment | \% | \% | \% |
| Self employed with <br> employees | 6,08 | 6,43 | 8,01 |
| Self employed without <br> employees | 22,03 | 24,92 | 22,23 |
| Employee | 67,12 | 61,35 | 63,41 |
| Family worker | 4,77 | 7,30 | 6,35 |

- PE040: "Highest ISCED level attained"

| PE040: "Highest ISCED level attained" | EU-SILC 2004 | LABOUR FORCE SURVEY B' QUARTER 2004 |
| :---: | :---: | :---: |
| Education level | \% | \% |
| Never attended any level of education | 2,9 | 3,3 |
| Primary education | 36,0 | 34,6 |
| Lower secondary education | 12,5 | 12,0 |
| Upper secondary education | 28,6 | 28,2 |
| Post secondary non tertiary esducation | 4,3 | 7,1 |
| First stage of tertiary education | 15,3 | 14,4 |
| Second stage of tertiary education | 0,4 | 0,4 |

- PL050 : 'Occupation'

| PL050 : 'Occupation' | HBS 2004-2005 | EU-SILC 2004 | LABOUR FORCE <br> SURVEY B' <br> QUARTER 2004 |
| :--- | :---: | :---: | :---: |
| Occupation | $\mathbf{\%}$ | $\mathbf{\%}$ | \% |
| Legislators and senior officials- <br> Corporate managers | 7,11 | 8,19 | 10,44 |
| Physical, mathematical, <br> engineering science and other <br> professionals | 11,40 | 14,07 | 14,06 |
| Physical, engineering science <br> assosiate professionals and other <br> assosiate professionals | 5,43 | 8,62 | 7,67 |
| Office clerks and customer <br> services clerks | 14,71 | 9,98 | 11,32 |
| Personal and protective services | 19,15 | 13,93 | 13,70 |
| workers, models, salespersons and <br> demonstrators miscellanous | 1,11 | 0,80 | 1,40 |
| Skilled agricultural and fishery <br> workers | 10,99 | 15,26 | 12,06 |
| Extraction and building trades <br> workers, other craft and related <br> trades workers. Metal machinery <br> and related trades workers. <br> Precision,handicraft, printing and <br> related trades workers | 15,75 | 15,12 | 7,60 |
| Stationary-plant and related <br> operators,drivers and mobile plant <br> operators, machine operators and <br> assemblers | 5,99 | 7,13 | 15,35 |
| Sales and services elementary <br> occupations,agricultural,fishery <br> and related labourers labourers in <br> mining,construction,manufacturing <br> and transport | 8,36 | 6,90 |  |
| Armed forces |  |  |  |

- PL110: "Economic activity"

| PL110: "Economic activity" | HBS 2004-2005 | EU-SILC 2004 | LABOUR FORCE SURVEY B' QUARTER 2004 |
| :---: | :---: | :---: | :---: |
| ECONOMIC ACTIVITY | \% | \% | \% |
| Agriculture, hunting, and forestry | 11,13 | 15,49 | 12,32 |
| Fishing | 0,32 | 0,29 | 0,28 |
| Mining and quarrying | 0,32 | 0,49 | 0,34 |
| Manufacturing industry | 11,54 | 11,07 | 13,15 |
| Electricity, gas and water suplly | 1,16 | 1,10 | 0,90 |
| Construction | 9,37 | 7,30 | 8,08 |
| Wholesale and retail trade | 18,35 | 18,57 | 17,28 |
| Hotels and restaurants | 6,24 | 6,14 | 6,46 |
| Transport, storage and communication | 7,10 | 5,66 | 6,29 |
| Financial intermediation | 2,69 | 2,56 | 2,60 |
| Real estate | 5,47 | 5,68 | 6,53 |
| Public administration | 9,13 | 8,83 | 8,22 |
| Education | 6,14 | 6,86 | 7,35 |
| Health and social work | 4,47 | 5,01 | 5,06 |
| Other community, social and personal service activities | 3,65 | 3,17 | 3,58 |
| Private households with employed persons | 2,69 | 1,67 | 1,52 |
| Extra-territorial organizations and bodies | 0,24 | 0,12 | 0,03 |

- Household by size

|  | HBS 2004-2005 | EU-SILC 2004 |
| :--- | :---: | :---: |
| Househols type | 20,24 | 19,77 |
| One person household | 31,90 | 30,07 |
| Two persons household | 20,90 | 19,90 |
|  | 19,42 | 21,37 |
| Four persons household | 5,29 | 6,17 |
| Five persons household | 2,24 | 2,72 |
| More than six persons <br> household |  |  |

- HH020: "Tenure status"

| Tenure status | HBS 2004 -2005 | EU-SILC 2004 |
| :--- | :---: | :---: |
| Owner | 80,0 | 79,7 |
| Tenant | 20,0 | 20,3 |

- HH080: "Bath or shower in dwelling"

| Bath or shower in dwelling | HBS 2004-2005 | EU-SILC 2004 |
| :--- | :---: | :---: |
| Yes | 98,2 | 97,1 |
| No | 1,8 | 2,9 |

- HH090: "Indoor flushing toilet for sole use of household"

| Indoor flushing toilet for <br> sole use of household | HBS 2004 -2005 | EU-SILC 2004 |
| :--- | :---: | :---: |
| Yes | 94,8 | 95,5 |
| No | 5,2 | 4,5 |

- HH0190: "Dwelling type"

| Dwelling type | HBS 2004 -2005 | EU-SILC 2004 |
| :--- | :---: | :---: |
| Detached house | 32,7 | 36,6 |
| Semidetached house | 10,8 | 10,0 |
| Apartment or flat | 56,0 | 53,3 |
| Some other kind of <br> accomodation | 0,5 | 0,1 |

- "Non monetary household deprivation"

| Non monetary household <br> deprivation | HBS 2004 -2005 | EU-SILC 2004 |
| :--- | :---: | :---: |
| Telephone | 0,5 | 1,1 |
| Colour TV | 1,3 | 0,8 |
| Computer | 19,0 | 17,9 |
| Washing machine | 6,7 | 3,8 |
| Car | 15,0 | 13,5 |

The only variables not being in coherence with other sources' variables are listed below:

- Variable PL015: "Have you ever worked" (for persons not working but having worked in the past)
$\begin{array}{|l|c|c|}\hline \text { Variable PL015 : Have you } \\ \text { ever worked }\end{array} \quad$ EU-SILC 2004 $\left.\begin{array}{c}\text { LABOUR } \\ \text { FORCE SURVEY } \\ \text { B' QUARTER } \\ \text { 2004 }\end{array}\right]$

The number of persons not working at the present, but having worked in the past, computed from the Labor Force Survey is considered as more accurate, than the one of the EU-SILC since the coefficient of variation of the specific characteristic from the EU-SILC is 1,3 while the one from the LFS is 0,7 .

- Variable PL120: "Reason for working less than 30 hours per week"

| Variable PL120 | EU-SILC 2004 | LABOUR <br> FORCE SURVEY <br> B' QUARTER <br> 2004 |
| :---: | :---: | :---: |
| Number of persons working <br> less than 30 hours per week | 6,3 | 4,1 |

We consider EU-SILC data more qualitative, as the LFS surveys, in the past 3 years, show that the percentage of persons working less than 30 hours per week remains stable. Also, the LFS shows very low percentages of pesons working in part time jobs in retail commerce, hotels, restaurants and in education, while, by inference it is accepted that the percentages are higher.

## - Variable PL140: "Type of contract"

As far as the accurary is concerned the percentage of persons in permanent work calculated from the LFS is considered as more accurate, since the coefficient of variation of it is 0,4 while that of SILC 1,3.

| Variable PL140 : Type of <br> contract | EU-SILC 2004 | LABOUR <br> FORCE SURVEY <br> B' QUARTER <br> 2004 |
| :--- | :---: | :---: |
| Permanent job/work contract <br> of unlimited duration | 87,6 | 74,9 |
| Temporary job/work contract <br> of limited duration | 12,4 | 25,1 |

## 5. CONCLUSION

Concluding we can say that the EU-SILC project gave qualitative data, in coherence with data from administrative sources, where these data were available. The small deviations existing in specific income variables showed that in the years to come extra efforts should be made to collect social benefits more accurately.

As far as self-employment income and interest, dividends, profits from capital investments in unincorporated business, are concerned, that there exists a general problem in the reliable data.

The National Statistical Service of Greece will keep on collecting qualitative data and producing the social structural indicators being absolutely necessary for policy making both at national and European level.

## References

> Regulation (EC) no 1177/2003 of the European Parliament and of the council of 16 June 2003, concerning Community statistics on income and living conditions (EUSILC), Office Journal of the European Union, L 165, volume 46, Brussells, 2003
> Quality evaluation ctriteria and content of the intermediate and final quality report of EU-SILC instrument, Commission regulation (EC) No 28/2004.
> Updated definitions of EU-SILC instrument, Commission regulation (EC) No 1980/2003
> Fieldwork aspects and the imputation procedures of EU-SILC instrument, Commission regulation (EC) No 1981/2003
> Sampling and racing rules of EU-SILC instrument, Commission regulation (EC) No 1982/2003
> List of target primary variables of EU-SILC instrument, Commission regulation (EC) No 1983/2003
> Description of target variables, doc EU-SILC 65/04, , European Commission, Eurostat, Directorate E: Social and regional statistics and geographical information system, Unit E2: Living conditions, 2004
> Common Cross-sectional EU indicators based on EU-SilC; the gender pay gap, doc EU-SILC 131-rev/04, Working Group on Statistics on Income and Living Conditions 2930 March 2004, Eurostat, Luxembourg

ANNEX 1: The questionnaires of the survey


[^0]:    ${ }^{1} 1=$ Current households members aged 16 and over
    ${ }^{2} 11=$ Information completed only from interview
    ${ }^{3} 21$ Individual unable to respond (illness, incapacity, etc.) and no proxy possible
    ${ }^{4} 23=$ Refusal to cooperate
    ${ }^{5} 31=$ Person temporarily away and no proxy possible
    ${ }^{6} 1=$ Face to face interview - PAPI
    ${ }^{7} 2=$ Face to face interview - CAPI
    ${ }^{8}=$ CATI
    ${ }^{9}=$ Self-administered by respondent
    ${ }^{10}=$ Proxy interview

[^1]:    - Assistance -lump sum- to poor households in mountainous and disadvantegous areas

