# Statistics Iceland 

# FINAL QUALITY REPORT 

## EU-SILC-2008

## Iceland

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## 1. COMMON LONGITUDINAL EUROPEAN UNION INDICATORS BASED ON THE LONGITUDINAL COMPONENT OF EU-SILC

Iceland does not have access to SAS software and has not been able to calculate the longitudinal indicators.

## 2. Accuracy

### 2.1. Sample design

### 2.1.1 Type of sampling

There were four even one-stage simple random samples without stratification used for the 2008 EU-SILC in Iceland.

### 2.1.2 Sampling units

The sampling units are persons aged 16 years or more living in private households, selected from the Icelandic population register.

### 2.1.3 Stratification and sub-stratification criteria

The sample is post stratified, see 2.8 .

### 2.1.4 Sample size and allocation criteria

The gross sample size was 4,029 persons, set to meet demands for minimum effective sample size of both the cross-sectional and the longitudinal components.

### 2.1.5 Sample selection schemes

The sample plan for EU-SILC is a simple random sample in one step, and no upper age limit.

### 2.1.6 Sample distribution over time

The sample is a rotating panel sample of approximately 4,000 individuals selected by simple random sampling from the national register in the end of the year 2003. The sample is divided into four rotation groups of approximately 1,000 individuals, each of which is replaced by another 1,000 participants every successive year.

### 2.1.7 Renewal of sample: Rotational groups

The households of the selected respondents are the household units. Each person (and respective household) drawn remains in the sample for four years and rotates as shown in table 2.1.

Table 2.1 Rotation of waves in the Icelandic SILC survey

| Year t |  |  |  |  |  |  |  |
| ---: | :---: | ---: | :---: | ---: | ---: | ---: | ---: |
| Wave <br> Wumber | Number <br> in <br> sample | Wave <br> number | Number <br> in <br> sample | Wave <br> number | Number <br> in <br> sample | Wave <br> number | Number <br> in <br> sample |
| 1 | 1.000 | 1 | 1.000 | 1 | 1.000 | 1 | 1.000 |
| 2 | 1.000 | 2 | 1.000 | 2 | 1.000 | 2 | 1.000 |
| 3 | 1.000 | 3 | 1.000 | 3 | 1.000 | 3 | 1.000 |
| 4 | 1.000 | 4 | 1.000 | 4 | 1.000 | 4 | 1.000 |

$\square$ Those drawn new in sample year $t$
Those drawn new in sample year $t-1$
Those drawn new in sample year t-2
Those drawn new in sample year t-3

|  | $\begin{array}{l}\text { Those drawn new in sample year } t+1 \\ \text { Those drawn new in sample year } t+2 \\ \text { Those drawn new in sample year } t+3\end{array}$ |
| :--- | :--- |
|  | Thown |

Persons 16 years of age are added to the sample every year in order to make up for the aging of the sample. Those who are 16 years old in 2003 will be 20 years old in 2007 and therefore there is need to add 16 year old persons to the sample every year. The gross number in the sample increases with those supplements.

### 2.1.8. Weighting

### 2.1.8.1 Design factor

The probability of a household being selected is equal to the number of persons aged 16 and older in the household. The weight for households and for all adult household members is the inverse of the number of adult household members as calculated in DB080, the household design weight:

$$
D B 080=\frac{1}{n 16+}
$$

Where
n16+ $=$ number of persons age $16+$ in the respondents households

### 2.1.8.2 Nonresponse adjustments

Post stratification weights are used to adjust the data to the population. The information on the population comes from the national register. The weights both adjust for nonresponse and
sampling error. The post stratification weights are based on age (14 groups total, 12 groups for 16 and older and 2 groups below 16), sex and residence ( 2 groups).

### 2.1.8.3 Adjustments to external data

Results are only calibrated with numbers from the national register as described above. Further description of those adjustments can be seen in intermediate report for 2008 and in other older reports.

### 2.1.8.4 Final longitudinal weights

Longitudinal weights are done using the same methods as cross sectional weights except the base is the wave of entrance into the survey and not the survey year as is the case in the cross sectional component. Since the base of the longitudinal weight is approximately $1 / 4$ of the cross sectional weight the average longitudinal weight produced was approximately 4 times larger than the cross sectional weight for the same individual.

### 2.1.8.5 Longitudinal nonresponse, wave attrition between 2004 and 2005

No measures were taken to counter attrition between waves in the 2005-2008 longitudinal data. The reason is failed attempts to do so for the 2004-2005 longitudinal surveys. The final quality report for 2007 describes those attempts.

### 2.1.8.6 Adjustments to external data

The national register is used to adjust the cross sectional weights taking into account the age, sex and area of residence. This process is described in sections 2.1.8.2 and 2.1.8.3. Considerable work was put into adjusting wave attrition to different variables in the survey as described in the final report for 2007. These attempts produced no relation of attrition to survey variables, including variables received from the national register.

### 2.1.8.7 Final longitudinal weights

See 2.1.8.4 and 2.1.8.5.

### 2.1.8.8. Final cross sectional weight

See 2.1.8.3.

### 2.1.9 Substitutions

No substitutions were applied.

### 2.2 Sampling errors

### 2.2.1. Standard errors and effective sample size

There were 4.029 households in the 2008 sample. During the field period, 90 of these proved to be non-eligible (either deceased, living in institutions or emigrated), thus giving a net sample of 3939 households. Interviews were completed for 2.887 of them.

Table 2.2.1.A The mean, the total number of observations and the standard errors for the following income components (unweighted data) by wave for the year 2008

| Wave | Variable | Mean | Before <br> imp | After imp | SE mean |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | HY010 | 10.016.369 | 1.855 | 1.855 | 146.869 |
| 1 | HYO20 | 7.272 .663 | 1.855 | 1.855 | 103.462 |
| 1 | HYO22 | 6.909 .270 | 1.855 | 1.855 | 105.256 |
| 1 | HYO23 | 6.419 .497 | 1.855 | 1.855 | 109.919 |
| 1 | HY040G | 813.217 | 1.855 | 1.855 | 82.596 |
| 1 | HY090G | 880.621 | 1.855 | 1.855 | 68.313 |
| 1 | HY050G | 333.726 | 1.855 | 1.855 | 17.844 |
| 1 | HY060G | 251.664 | 1.855 | 1.855 | 43.074 |
| 1 | HY070G | 174.503 | 1.855 | 1.855 | 3.646 |
| 1 | HY080G | 482.057 | 1.855 | 1.833 | 25.680 |
| 1 | HY081G | 453.514 | 1.855 | 1.833 | 20.946 |
| 1 | HY100G | 592.952 | 1.855 | 1.855 | 11.020 |
| 1 | HY110G | 163.404 | 1.855 | 1.855 | 12.095 |
| 1 | HY120G | 86.819 | 1.855 | 1.855 | 752 |
| 1 | HY130G | 407.421 | 1.855 | 1.828 | 16.741 |
| 1 | HY131G | 445.259 | 1.855 | 1.828 | 15.751 |
| 1 | HY140G | 2.604 .221 | 1.855 | 1.855 | 46.547 |
| 1 | PY010G | 3.416.769 | 1.855 | 1.855 | 74.496 |
| 1 | PY020G | 168.044 | 1.855 | 1.817 | 9.145 |
| 1 | PY021G | 499.811 | 1.855 | 1.832 | 30.634 |
| 1 | PY050G | 1.177.493 | 1.855 | 1.855 | 113.115 |
| 1 | PY090G | 350.809 | 1.855 | 1.855 | 52.544 |
| 1 | PY100G | 1.871 .125 | 1.855 | 1.855 | 78.545 |
| 1 | PY110G | 578.658 | 1.855 | 1.855 | 122.889 |
| 1 | PY120G | 2.660 .417 | 1.855 | 1.855 |  |
| 1 | PY130G | 1.369.278 | 1.855 | 1.855 | 128.734 |
| 1 | PY140G | 212.249 | 1.855 | 1.855 | 54.155 |
| 2 | HY010 | 9.727.051 | 1.608 | 1.608 | 156.857 |
| 2 | HYO20 | 7.098.552 | 1.608 | 1.608 | 116.313 |
| 2 | HYO22 | 6.731 .171 | 1.608 | 1.608 | 117.604 |
| 2 | HYO23 | 6.188 .851 | 1.608 | 1.608 | 121.524 |
| 2 | HY040G | 542.647 | 1.608 | 1.608 | 43.543 |
| 2 | HY090G | 902.205 | 1.608 | 1.608 | 102.895 |
| 2 | HY050G | 262.121 | 1.608 | 1.608 | 14.474 |
| 2 | HY060G | 269.783 | 1.608 | 1.608 | 43.613 |
| 2 | HY070G | 188.236 | 1.608 | 1.608 | 20.750 |
| 2 | HY080G | 439.032 | 1.608 | 1.584 | 18.465 |
| 2 | HY081G | 426.783 | 1.608 | 1.584 | 17.759 |
| 2 | HY100G | 626.585 | 1.608 | 1.608 | 11.825 |
| 2 | HY110G | 168.248 | 1.608 | 1.608 | 21.817 |
| 2 | HY120G | 85.358 | 1.608 | 1.608 | 852 |
| 2 | HY130G | 343.586 | 1.608 | 1.592 | 13.829 |
| 2 | HY131G | 381.224 | 1.608 | 1.592 | 12.036 |


| 2 | HY140G | 2.505 .865 | 1.608 | 1.608 |
| :--- | :--- | ---: | :--- | ---: |
| 2 PYO10G | 3.394 .327 | 1.608 | 1.608 | 82.899 |
| 2 PYO20G | 184.935 | 1.608 | 1.585 | 11.360 |
| 2 PY021G | 472.362 | 1.608 | 1.590 | 34.080 |
| 2 PY050G | 1.129 .173 | 1.608 | 1.608 | 113.672 |
| 2 PY090G | 412.968 | 1.608 | 1.608 | 84.520 |
| 2 PY100G | 1.659 .705 | 1.608 | 1.608 | 63.918 |
| 2 PY110G | 740.395 | 1.608 | 1.608 | 259.462 |
| 2 PY120G | 25.841 | 1.608 | 1.608 | 14.732 |
| 2 PY130G | 1.308 .609 | 1.608 | 1.608 | 113.850 |
| 2 PY140G | 874.164 | 1.608 | 1.608 | 744.410 |
| 3 | HY010 | 10.247 .436 | 1.542 | 1.542 | 210.428

$\left.\begin{array}{llrlr}4 & \text { HY100G } & 634.503 & 1.613 & 1.613 \\ 4 & 12.942 \\ 4 & \text { HY110G } & 162.835 & 1.613 & 1.613\end{array}\right) 13.737$

Table 2.2.1.B The mean, the number of observations and the standard error for the equivalised disposable income breakdown by sex, age groups and household size (unweighted data) in 2008 by wave

| Wave | Variable | Mean | Count | Valid N | SE Mean |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11 hh member | 2.455 .869 | 118 | 118 | 122.765 |
|  | 2 hh members | 3.588.776 | 405 | 405 | 100.395 |
|  | 3 hh members $4+\mathrm{hh}$ | 3.422 .382 | 398 | 398 | 79.967 |
|  | 1 members | 3.414.156 | 934 | 934 | 59.614 |
|  | <25 years | 3.272 .954 | 428 | 428 | 90.875 |
|  | 25-34 years | 3.146 .496 | 278 | 278 | 85.685 |
|  | 35-44 years | 3.279 .725 | 334 | 334 | 81.115 |
|  | 45-54 years | 3.637 .764 | 383 | 383 | 104.132 |
|  | 55-64 years | 4.006.066 | 235 | 235 | 130.458 |
|  | 65+ years | 2.987 .352 | 197 | 197 | 123.044 |
|  | Male | 3.438 .755 | 933 | 933 | 61.472 |
|  | Female | 3.346 .874 | 922 | 922 | 57.368 |
|  | 1 hh member | 2.482 .994 | 100 | 100 | 164.648 |
|  | 2 hh members | 3.594 .413 | 405 | 405 | 164.114 |
|  | 3 hh members $4+\mathrm{hh}$ | 3.500 .428 | 370 | 370 | 75.543 |
|  | 2 members | 3.390 .868 | 733 | 733 | 62.992 |
|  | <25 years | 3.282 .857 | 324 | 324 | 82.760 |
|  | 25-34 years | 3.249 .996 | 258 | 258 | 102.422 |
|  | 35-44 years | 3.265 .970 | 300 | 300 | 113.099 |
|  | 45-54 years | 3.636 .970 | 295 | 295 | 98.769 |
|  | 55-64 years | 3.992 .317 | 214 | 214 | 156.879 |
|  | 65+ years | 3.112.917 | 217 | 217 | 254.410 |
|  | Male | 3.460 .376 | 821 | 821 | 77.361 |
|  | Female | 3.359.253 | 787 | 787 | 76.850 |
|  | 1 hh member | 2.448 .345 | 94 | 94 | 147.623 |
|  | 2 hh members | 3.631.705 | 414 | 414 | 101.040 |
|  | 3 hh members 4+hh | 3.604.868 | 365 | 365 | 111.112 |
|  | members | 3.781 .453 | 669 | 669 | 129.533 |
|  | <25 years | 3.645 .749 | 294 | 294 | 167.400 |
|  | 25-34 years | 3.435 .296 | 266 | 266 | 150.652 |
|  | 35-44 years | 3.608.795 | 234 | 234 | 270.827 |
|  | 45-54 years | 3.859.152 | 331 | 331 | 113.341 |
|  | 55-64 years | 4.040 .215 | 223 | 223 | 148.874 |
|  | 65+ years | 2.942 .243 | 194 | 194 | 121.350 |
|  | Male | 3.624 .109 | 790 | 790 | 89.333 |
|  | Female | 3.611 .959 | 752 | 752 | 105.174 |
|  | 41 hh member | 2.726 .737 | 110 | 109 | 162.529 |
|  | 42 hh members | 3.384 .741 | 390 | 390 | 98.576 |
|  | 43 hh members 4+hh | 3.965 .327 | 332 | 332 | 267.762 |
|  | 4 members | 3.324 .258 | 781 | 781 | 83.238 |


| 4 | $<25$ years | 3.473 .354 | 345 | 345 | 177.286 |
| :--- | :--- | :--- | :--- | ---: | ---: |
| 4 | $25-34$ years | 2.836 .088 | 260 | 260 | 75.898 |
| 4 | $35-44$ years | 3.444 .573 | 292 | 291 | 207.019 |
| 4 | $45-54$ years | 3.830 .719 | 315 | 315 | 183.521 |
| 4 | $55-64$ years | 3.992 .413 | 205 | 205 | 229.900 |
| 4 | $65+$ years | 2.891 .915 | 196 | 196 | 114.645 |
| 4 | Male | 3.454 .112 | 808 | 807 | 98.824 |
| 4 | Female | 3.406 .868 | 805 | 805 | 109.003 |

As we do not have resources take the design of the survey and the calibration into account in the caluclation of standard error, simple random sample is assumed

### 2.3 Nonsampling errors

Errors other than sampling errors can be placed in three categories: coverage errors, nonresponse errors and measurement errors.

### 2.3.1 Sampling frame and coverage errors

The sampling frame is the population register of Iceland in the end of the year 2007. Eligible for the sample were all persons 16 and older who were living in Iceland according to the register. Those registered at institutions were excluded from the sample.

The national register is updated continuously. However, it does not always contain correct information on changing of residence. People may move abroad or to an institution without giving that information to the national register. Therefore the national register over represents young people who tend to go abroad for their studies and older people who sometimes maintain a private address in spite of living in an institution.
This is adjusted for with information received during the data collection process. For instance if it turns out that 5\% of 25-29 years old females from the capital area are living abroad in spite of being in the register then the population frame is adjusted to these information and the relevant group is decreased by $5 \%$. These adjustments are made before calculating the post stratification weights.

Under coverage of foreign citizens who live in Iceland is possible but it can be hard to assess. However it is likely that most foreign citizens who live here are working legally and are therefore in the national register. The fact that Iceland is an island makes it hard for foreigners to enter and stay in the country without being registered.

### 2.3.2 Measurement and processing errors

Errors of this kind can be classified into three categories: Design errors, interviewer errors and processing errors.

### 2.3.2.1 Design errors

The questionnaire may be the cause of measurement errors. The phrasing of questions can cause misunderstanding as can the ordering of questions affect responses. The work of designing the survey electronically in Blaise also leaves room for errors.
Here are some comments on those variables and other cases where there might be deviations from Eurostat standards.

The design errors are discussed in the intermediate report for 2008.

## Longitudinal variables

## R-section

RB140: Iceland has had problems with questions about former household members. None of these questions was included until 2007. In 2007 attempts was made to fix this but problems stil remained since for those cases when the „selected respondent" moved from one household to another there was confusion and information were not gathered. Therefore for a certain percentage of households we are missing information for these variables. This was only fixed for the 2010 survey.

RB150: Same as RB140
RB160: Same as RB140
RB170: Same as RB140.
RB180: Same problem as RB140.
RB190: Same problem as RB190

## H-section

HB100: We only have the total interview length for the years 2004-2006. The length of separate parts of the survey was first collected in 2007.

HS130: There is a high percentage of DK answers. A follow up question was added to the questionnaire in 2007 resulting in lower percentage of missing data. People seem to have a problem with answering this question and we have not been able to get a higher response rate.

HH061: Same as for HS130: Follow up question was included in 2007 resulting in lower item missing data. Hard to see what else can be done since people are unwilling to give the information.

HH081: There is a very low percentage in Iceland without a bath or a shower in the dwelling. We did not the information for HH081 until the 2010 survey. Instead we use HH080.

## P-section

PL160: Before 2008 those who entered the survey for the first time were not asked this question. It was only for 2nd, 3rd and 4th wave that they were asked. For 2007 there was also a programming error resulting in more people missing the question. This was fixed before the 2008 survey.

PL170: For the year 2007 these are just missing values because the respondent did not want to give an answer or could not answer the question. For the year 2008 a syntax error was fixed and the data should be ok now.

PL190: We only started collecting this information in 2007.
PL200: The question was first asked in 2007.

## PL210A-L

The data was first collected by month for 2007. Before that we only have the number of months over the year as is collected for the cross sectional data set.

PY031G: We have no information for this variable.

### 2.3.2.2. Interviewer and processing errors

We refer to the 2007 final quality report for interviewer and processing errors. No changes were made between 2007 and 2008 that should affect them.

### 2.3.3. Nonresponse errors

In general, males are more difficult to reach than females and young people are harder to reach than older people. People living in the capital region are more often absent from home than people elsewhere in Iceland.

Refusals to participate in the survey are more prevalent among inhabitants of the capital city region and older persons. In contrast, women, people outside the capital city region and young people are less likely to refuse to participate.

To counter bias, the results were weighted by sex, age and residence.

### 2.3.3.1 Achieved sample size

| Year | Wave | Sel. Resp | Pers 16+ | All_hh_members |
| :--- | :--- | ---: | ---: | ---: |
| 2005 Wave 1 | 719 | 1.645 | 2.216 |  |
| 2005 | Wave 2 | 719 | 1.679 | 2.216 |
| 2005 | Wave 3 | 739 | 1.671 | 2.202 |
| 2005 | Wave 4 | 751 | 1.675 | 2.206 |
| 2005 | Total | 2.928 | 6.670 | 8.840 |
| 2006 Wave 1 | 685 | 1.590 | 2.061 |  |
| 2006 Wave 2 | 705 | 1.610 | 2.152 |  |
| 2006 Wave 3 | 713 | 1.645 | 2.176 |  |
| 2006 Wave 4 | 742 | 1.676 | 2.209 |  |
| 2006 Total | 2.845 | 6.521 | 8.598 |  |
| 2007 Wave 1 | 705 | 1.636 | 2.132 |  |
| 2007 Wave 2 | 704 | 1.600 | 2.068 |  |
| 2007 Wave 3 | 715 | 1.630 | 2.191 |  |
| 2007 Wave 4 | 748 | 1.701 | 2.264 |  |
| 2007 | Total | 2.872 | 6.567 | 8.655 |
| 2008 Wave 1 | 794 | 1.855 | 2.432 |  |
| 2008 Wave 2 | 707 | 1.608 | 2.099 |  |
| 2008 Wave 3 | 678 | 1.542 | 1.986 |  |
| 2008 | Wave 4 | 708 | 1.613 | 2.127 |
| 2008 | Total | 2.887 | 6.618 | 8.644 |

This table is based on the cross sectional files, including all the sample for each wave.

Table 2.4.A shows a table broken down by RB250 and RB100 (selected, not selected), by rotational group.

### 2.3.3.2.A. Unit nonresponse

## Household nonresponse rates (NRh)

$N R h=(1-R a * R h)) * 100$
Where
$R a=\frac{\text { Number }_{-} \text {of _addresses_successfully_contacted }}{\text { Number_of }}$
$R a=\frac{\sum(D B 120=11)}{\sum(D B 120=\text { all })-\sum(D B 120=23)}=\frac{3939}{4029-90}=1$

$R h=\frac{\sum(D B 130=1)}{\sum(D B 130=\text { all })}=\frac{2887}{3939}=0.7329$
$N R h=(1-0.7329) * 100=26.71$

## Individual nonresponse rates (NRp)

$N R p=(1-(R p)) * 100$

Where

$R p=\frac{6618}{6618}=1$
$N R p=1-(1-(R p)) * 100=1-(0) * 100=100$

## Overall individual nonresponse rates (*NRp)

*NRp $=(1-(R a * R h * R p)) * 100=(1-(1 * 0.2671 * 1)) * 100=73.29$
2.3.3.2.B Unit nonresponse by rotational group

```
Group 1 Group 2 Group 3
```

| Ra | 1,00 | 1,00 | 1,00 |
| :--- | :--- | :--- | :--- |
| Rh | 0,76 | 0,73 | 0,71 |
| NRh | 0,24 | 0,27 | 0,29 |
| Rp | 1,00 | 1,00 | 1,00 |
| NRp | 0,24 | 0,27 | 0,29 |

Ra- Proportion of addresses contacted
Rh - Proportion of complete household interviews accepted for database
NRh - Household nonresponse rate
Rp-Proportion of complete personal interview within the households accepted for data base NRp - Individual nonresponse rate

For the longitudinal tables it should be noted that there are no split off households (no DB110 $=$ 8) since only selected respondents are followed and whoever are living with them are surveyed. Given the Icelandic design, the only way for a new household to enter the survey in a wave other than the first wave is with a selected responsent who is younger than 16 years in the first wave he or she enters the survey.

### 2.3.3.2.C Longitudinal tables for calculation of nonresponse

## Household response rates: Comparison of result codes between wave 2 and wave 1

### 2.3.3.2.C Wave 1 and 2

## Group 1

| Group 1 |  | DB135=1 | DB130 $=21$ | DB130 $=22$ | DB130 $=23$ | DB120 $=23$ | DB110 $=3 \_7$ | Total |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Wave 1 | DB135=1 | 647 | 113 | 52 | 2 | 1 | 0 | 815 |
|  | DB135=2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wave 2 | DB110=8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | DB110 $=9$ | 14 | 1 | 0 | 0 | 0 | 0 | 15 |
|  | Total | 661 | 114 | 52 | 2 | 1 | 0 | 830 |

### 2.3.3.2.C Wave 1 and 2

## Group 2.

| Group 2 |  | DB135=1 | DB130=21 | DB130=22 | DB130=23 | DB120=23 | DB110 $=3 \_7$ | Total |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Wave 1 | DB135=1 | 619 | 144 | 61 | 7 | 11 | 0 | 842 |
|  | DB135=2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wave 2 | DB110=8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | DB110=9 | 12 | 2 | 1 | 0 | 0 | 0 | 15 |
|  | Total | 631 | 146 | 62 | 7 | 11 | 0 | 857 |

### 2.3.3.2.C Wave 1 and 2

## Group 3.

| Group 3 |  | DB135=1 | DB130=21 | DB130=22 | DB130=23 | DB120=23 | DB110 $=3 \_7$ | Total |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Wave 1 | DB135=1 | 688 | 153 | 65 | 13 | 19 | 0 | 938 |
|  | DB135=2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wave 2 | DB110=8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | DB110=9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Total | 688 | 153 | 65 | 13 | 19 | 0 | 938 |


| Wave response rates. Percentages    <br>  Wave Refusal No |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | resp.rate | rate | contact | Total |  |
| Group 1 | 79,64 | 13,73 | 6,63 | 100 |  |
| Group 2 | 73,63 | 17,04 | 9,33 | 100 |  |
| Group 3 | 73,35 | 16,31 | 10,34 | 100 |  |

Longitudinal follow-up rates, follow-up ratio and achieved sample size. Percentages

|  | Longitudinal follow up rates | Follow up rato | Achieved sample size ratio |
| :---: | :---: | :---: | :---: |
| Group 1 | 81,10 | 87,73 | 81,10 |
| Group 2 | 81,59 | 83,02 | 74,94 |
| Group 3 | 81,66 | 81,66 | 73,35 |

Household response rates: Comparison of results codes between wave $t$ and wave $t-1$
2.3.3.2.D: Other waves

## Group 1

Group 1

|  | DB135 $=$ | DB130 $=$ | DB130 $=2$ | DB130 $=2$ | DB120 $=2$ | DB110 $=3,4,5$, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Wave 2-3 | 1 | 21 | 2 | 3 | 3 | 6,7 |  |

1: Wave 1, DB135 =

| 1 | 582 | 44 | 0 | 0 | 0 | 0 | 626 |
| :--- | ---: | ---: | ---: | ---: | :--- | ---: | ---: |
| 2: DB135 $=2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4: DB120 $=22$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6: DB130 $=22$ | 0 | 0 | 16 | 0 | 0 | 0 | 16 |
| 8: DB130 $=23$ | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| 10: DB130 $=24$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11: DB110 $=8$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12: DB110 $=9$ | 11 | 0 | 2 | 0 | 0 | 0 | 13 |
|  | 593 | 44 | 18 | 5 | 0 | 0 | 660 |

### 2.3.3.2.D Other waves <br> Group 1

Group 1
DB135 $=$ DB130 $=$ DB130 $=2 \quad$ DB130 $=2 \quad$ DB120 $=2 \quad$ DB110 $=3,4,5$,

| Wave $3-4$ | 1 | 21 | 2 | 3 | 3 | 6,7 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

1: Wave 1, DB135 =

| 1 | 572 | 25 | 0 | 0 | 0 | 0 | 597 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2:$ DB135 $=2$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $4:$ DB120 $=22$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6: DB130 $=22$ | 0 | 0 | 14 | 0 | 0 | 0 | 14 |


| 8: DB130 $=23$ | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 10: DB130 $=24$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $11:$ DB110 $=8$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $12:$ DB110 $=9$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 572 | 25 | 14 | 6 | 0 | 0 | 617 |

### 2.3.3.2.D Other waves

## Group 2

Group 2

|  | DB135 = | DB130 = | DB130=2 | DB130=2 | DB120=2 | DB110=3, 4, 5, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wave 2-3 | 1 | 21 | 2 | 3 | 3 | 6, 7 | Total |
| 1: Wave 1, DB135 = |  |  |  |  |  |  |  |
| 1 | 564 | 41 | 0 | 0 | 0 | 0 | 0605 |
| 2: DB135 = 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4: DB120 $=22$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6: DB130 $=22$ | 22 | 0 | 0 | 012 | 0 | 0 | 034 |
| 8: DB130 $=23$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10: DB130 $=24$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11: DB110 $=8$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12: DB110 $=9$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 586 | 41 | 0 | 0 14 | 0 | 0 | 0641 |

Wave response rates.

|  | Wave | Refusal | No |  |
| :---: | :---: | :---: | :---: | :---: |
| Wave 2- |  |  |  |  |
| 3 | resp.rate | rate | contact | Total |
| Group 1 | 89,85 | 6,67 | 3,48 | 100 |
| Group 2 | 91,42 | 6,40 | 2,18 | 100 |
|  | Wave | Refusal | No |  |
| Wave 3- |  |  |  |  |
| 4 | resp.rate | rate | contact | Total |
| Group 1 | 92,71 | 4,05 | 3,24 | 100 |

## Longitudinal follow-up rates, follow-up ratio and achieved sample size ratio.. Percentages

|  | Follow- <br> Longitudinal |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
| up |  |  |  |  | | Achieved |
| :--- |
| sample |


| 2 | rate |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Group 1 | 92,71 | 92,71 | 95,81 |

## Longitudinal response rate for persons

### 2.3.3.2.E Personal interview outcome.

## Group 3

Sample persons (RB100=1 and RB245 in ('1', '2', '3) forwarded from last wave

|  | RB250 | RB250 | RB250 | RB250 | RB250 | RB250 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Group 3 | $11,12,13$ | 21 | 23 | 31 | 32 | 33 | Total |  |
| Wave 1 |  | 688 | 0 | 0 | 0 | 0 | 0 | 688 |
| Wave 1 to wave 2 |  | 611 | 0 | 0 | 0 | 0 | 0 | 611 |
| Non sample persons |  |  |  |  |  |  |  |  |
|  | RB250 |  | RB250 | RB250 | RB250 | RB250 | RB250 |  |
| Group 3 | $11,12,13$ | 21 | 23 | 31 | 32 | 33 | Total |  |
| Wave 1 | 908 | 0 | 0 | 0 | 0 | 0 | 908 |  |
| Wave 1 to wave 2 | 710 | 0 | 0 | 0 | 0 | 0 | 710 |  |

Nonsample persons and sample persons

| Group 3 | $11,12,13$ | 21 | 23 | 31 | 32 | 33 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Wave 1 | 1596 | 0 | 0 | 0 | 0 | 0 | 1596 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{llllllll}\text { Wave } 1 \text { to wave } 2 & 1321 & 0 & 0 & 0 & 0 & 0 & 1321\end{array}$

## Groiup 2

Sample persons (RB100=1 and RB245 in ('1', '2', '3) forwarded from last wave

| RB250 | RB250 | RB250 | RB250 | RB250 | RB250 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
| $11,12,13$ | 21 | 23 | 31 | 32 | 33 | Total |

Group 2
11, 12, 1
Wave 2
Wave 2 to wave 3
Wave 3 to wave 4

| 619 | 0 | 0 | 0 | 0 | 0 | 619 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{lllllll}576 & 0 & 0 & 0 & 0 & 0 & 576\end{array}$
$\begin{array}{lllllll}527 & 0 & 0 & 0 & 0 & 0 & 527\end{array}$
Non sample persons

|  | RB250 | RB250 | RB250 | RB250 | RB250 | RB250 |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Group 2 | $11,12,13$ | 21 | 23 | 31 | 32 | 33 | Total |
| Wave 2 | 826 | 0 | 0 | 0 | 0 | 0 | 826 |
| Wave 2 to wave 3 | 695 | 0 | 0 | 0 | 0 | 0 | 695 |
| Wave 3 to wave 4 | 605 | 0 | 0 | 0 | 0 | 0 | 605 |

Sample and nonsample persons

| RB250 | RB250 | RB250 | RB250 | RB250 | RB250 |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| 11, 12, 13 | 21 | 23 | 31 | 32 | 33 | Total |
| 1445 | 0 | 0 | 0 | 0 | 0 | 1445 |
| 1271 | 0 | 0 | 0 | 0 | 0 | 1271 |
| 1132 | 0 | 0 | 0 | 0 | 0 | 1132 |

## Group 1

Sample persons (RB100=1 and RB245 in ('1', '2', '3) forwarded from last wave
RB250 RB250 RB250 RB250 RB250 RB250

| Group 1 | $11,12,13$ | 21 | 23 | 31 | 32 | 33 | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{llllllll}\text { Wave } 1 & 647 & 0 & 0 & 0 & 0 & 0 & 647\end{array}$
$\begin{array}{llllllll}\text { Wave } 1 \text { to wave } 2 & 596 & 0 & 0 & 0 & 0 & 0 & 596\end{array}$

| Wave 2 to wave 3 | 583 | 0 | 0 | 0 | 0 | 0 | 583 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wave 3 to wave 4 | 547 | 0 | 0 | 0 | 0 | 0 | 547 |
| Non sample persons |  |  |  |  |  |  |  |
|  | RB250 | RB250 | RB250 | RB250 | RB250 | RB250 |  |
| Group 1 | 11, 12, 13 | 21 | 23 | 31 | 32 | 33 | Total |
| Wave 1 | 832 | 0 | 0 | 0 | 0 | 0 | 832 |
| Wave 1 to wave 2 | 697 | 0 | 0 | 0 | 0 | 0 | 697 |
| Wave 2 to wave 3 | 677 | 0 | 0 | 0 | 0 | 0 | 677 |
| Wave 3 to wave 4 | 640 | 0 | 0 | 0 | 0 | 0 | 640 |
| Sample and nonsample persons |  |  |  |  |  |  |  |
|  | RB250 | RB250 | RB250 | RB250 | RB250 | RB250 |  |
| Group 1 | 11, 12, 13 | 21 | 23 | 31 | 32 | 33 | Total |
| Wave 1 | 1479 | 0 | 0 | 0 | 0 | 0 | 1479 |
| Wave 1 to wave 2 | 1293 | 0 | 0 | 0 | 0 | 0 | 1293 |
| Wave 2 to wave 3 | 1260 | 0 | 0 | 0 | 0 | 0 | 1260 |
| Wave 3 to wave 4 | 1187 | 0 | 0 | 0 | 0 | 0 | 1187 |

## Wave response rate

## Group 3

Achieved sample size ratio for sample persons
Wave 1 to wave 2
0,89

Achieved sample size ratio for sample and non sample persons
Wave 1 to wave 2
0,78

Achieved sample size ratio for non sample persons
Wave 1 to wave 2
0,83

## Group 2

Achieved sample size ratio for sample persons
Wave 2 to wave 3
0,93
Wave 3 to wave $4 \quad 0,91$

Achieved sample size ratio for sample and non sample persons
Wave 2 to wave 30,84
Wave 3 to wave 4
0,87

Achieved sample size ratio for non sample persons
Wave 2 to wave 3
0,88
Wave 3 to wave 4
0,89

## Group 1

Achieved sample size ratio for sample persons

| Wave 1 to wave 2 | 0,92 |
| :--- | :--- |
| Wave 2 to wave 3 | 0,98 |
| Wave 3 to wave 4 | 0,94 |

Achieved sample size ratio for sample and non sample persons

| Wave 1 to wave 2 | 0,84 |
| :--- | :--- |
| Wave 2 to wave 3 | 0,97 |
| Wave 3 to wave 4 | 0,95 |

Achieved sample size ratio for non sample persons

| Wave 1 to wave 2 | 0,87 |
| :--- | :--- |
| Wave 2 to wave 3 | 0,97 |
| Wave 3 to wave 4 | 0,94 |



DB120 =
11
Group 1 Wave 2305
100,00\%
Wave 322
100,00\%
Wave $4 \quad 245$
100,00\%
Group 3 Wave 270
100,00\%
Wave $3 \quad 235$
100,00\%

## Household questionnaire result



## Household interview acceptance

DB135 =
1
Group 1 Wave 12008 100,00\%
Wave $2 \quad 1844$ 100,00\%

Wave 31840 100,00\%
Wave $4 \quad 1690$ 100,00\%

Group 3 Wave $1 \quad 1873$ 100,00\%
Wave $2 \quad 1767$ 100,00\%

Wave 31591 100,00\%
Group 3 Wave 12082 100,00\%
Wave 21888 100,00\%

### 2.3.3.3 Distribution of households

Table 2.3.3.3.A Distribution of households by 'record of contact address' (DB120)

|  | Rot 1 | Rot 2 | Rot 3 | Rot 4 | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Contacted | 1051 | 966 | 955 | 967 | 3939 |
| Does not exist | 22 | 22 | 23 | 23 | 90 |
| Total | 1073 | 988 | 978 | 990 | 4029 |

Table 2.3.3.3.B Distribution of households by 'household questionnaire result' (DB130)

|  | Rot 1 | Rot 2 | Rot 3 | Rot 4 | Total |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Completed | 768 | 759 | 700 | 676 | 2903 |  |
| Refusal | 130 | 132 | 146 | 148 | 556 |  |
| Temporarily | 132 | 130 | 94 | 106 | 462 |  |
| away |  |  |  |  |  |  |
| Unable to <br> respond | 13 | 8 | 14 | 11 | 46 |  |
| Other reasons | 3 | 0 | 0 | 2 | 5 |  |

Table 2.3.3.3.C Distribution of households by 'household interview acceptance'(DB135)

|  | Rot 1 | Rot 2 |  | Rot 3 | Rot 4 | Total |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Accepted | 794 | 707 | 678 | 708 | 2887 |  |  |
| Rejected | 0 | 0 | 0 | 0 | 0 |  |  |
| Total | 794 | 707 | 678 | 708 | 2887 |  |  |

A change was made when processing the 2006 data that caused a minor increase in nonresponse. Households which included individuals for whom we were not able to retrieve social ID numbers were categorized as nonresponse. In 2004 and 2005 they would have been in the data base with zero income. Absence of social ID number means that it is impossible to connect the survey data to the tax register which means that all the income variables will be empty (or 0 ) for these individuals which can greatly affect the equivalised disposable income of the households. This was further justified by the fact that only about $1 \%$ of the households was taken out, all of which had underestimated equivalised disposable income since an "income less" person was living there.

## Table 2.3.3.4.A. Distribution of persons for membership status (RB110)



|  | Wave 2 | 1624 | 64 | 31 | 48 | 44 | 4 | 0 | 1815 |
| ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | $89,48 \%$ | $3,53 \%$ | $1,71 \%$ | $2,64 \%$ | $2,42 \%$ | $0,22 \%$ | $0,00 \%$ | $100,00 \%$ |
| Group 1 | Wave 3 | 1452 | 71 | 20 | 48 | 43 | 5 | 0 | 1639 |
|  |  | $88,59 \%$ | $4,33 \%$ | $1,22 \%$ | $2,93 \%$ | $2,62 \%$ | $0,31 \%$ | $0,00 \%$ | $100,00 \%$ |
|  |  | 2008 | 0 | 0 | 0 | 0 | 0 | 0 | 2008 |
|  | Wave 2 | $100,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $100,00 \%$ |
|  | 1728 | 85 | 31 | 0 | 0 | 0 | 0 | 1844 |  |
|  | $93,71 \%$ | $4,61 \%$ | $1,68 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $100,00 \%$ |  |
|  | Wave 3 | 1671 | 99 | 23 | 46 | 1 | 39 | 7 | 1886 |
|  |  | $88,60 \%$ | $5,25 \%$ | $1,22 \%$ | $2,44 \%$ | $0,05 \%$ | $2,07 \%$ | $0,37 \%$ | $100,00 \%$ |
|  | Wave 4 | 1555 | 60 | 22 | 53 | 0 | 48 | 5 | 1743 |
|  | $89,21 \%$ | $3,44 \%$ | $1,26 \%$ | $3,04 \%$ | $0,00 \%$ | $2,75 \%$ | $0,29 \%$ | $100,00 \%$ |  |

Table 2.3.3.4.B. Distribution of persons moving out by variable RB120

## RB110 $=$

5
Group 3 Wave 255
Group 2 Wave 248
Group 2 Wave 38
Group 1 Wave 36
Group 1 Wave 43

### 2.3.3.5. Item nonresponse

For cost or income related variables imputation was used to treat item nonresponse.
Item nonresponse is not assumed to be in the income variables that come from registers. The only income variables where imputation was applied were the ones not received from registers, "regular inter-household cash transfer received", and "regular inter-household cash transfer paid", "Non-Cash employee income" and "Company car" (HY080G, HY130G, PY020G and PY021G). Imputations were used for those variables based on survey data.

For HY080G and HY130G a question was added in 2007 for those not knowing the amount paid for alimony asking for the number of children for whom alimony was paid or received. This was done in order to help with imputation.

HH060: When indicating that the household was paying a non-zero amount for rent but not giving the amount imputation was applied. Variables used were area of residence, number of household members, number of rooms in the dwelling and the type of owner of the dwelling (profit - non-profit).

A follow up question was added before the 2007 survey in case of "don't know" to decrease item nonresponse for HH060.

HH061: There has always been high item nonresponse for the question of imputed rent in Iceland. One reason is the small rental market in Iceland. This becomes especially difficult in smaller towns where it might be hard to say whether certain houses could be rented at all no
matter how low the rent would be. To treat this problem we added a follow up question for the 2007 survey encouraging respondents to give their best estimate if they said "don't know".

HS130: The question on the lowest monthly income to make ends meet has had high levels of item nonresponse and a follow up question was added to the questionnaire before the 2007 survey to try to reduce that.

PE030: In some cases people had difficulties giving an answer about the year of highest level of education on other household members. We added a follow up question asking to give their best guess.

PL060: Number of working hours was imputed for. If the respondent had reported working hours on earlier waves and was holding the same job the last value given was used. Otherwise when respondent was working but did not give number of hours, regression analysis was used with the variables: personal income, sex, age and whether the respondent claimed to work full time or part time.

Table 2.3.3.5.A Number receiving an amount and item nonresponse for the following income components

|  | \% received | \%missing | \% partial |
| :---: | :---: | :---: | :---: |
| Total HH gross inc (HYO1O) | 99,98 | 0,02 | 0,00 |
| Total HH disp. Inc (HYO2O) | 99,98 | 0,02 | 0,00 |
| Total HH disp before (HYO22) | 99,98 | 0,02 | 0,00 |
| Total HH disp. Including (HYO23) | 99,98 | 0,02 | 0,00 |
| Gross imputed rent (HY030) | 99,98 | 0,02 | 0,00 |
| Gross Income from rental (HYO40) | 99,98 | 0,02 | 0,00 |
| Gross income from investments (HYO90) | 99,98 | 0,02 | 0,00 |
| Gross family allowences (HY050) | 99,98 | 0,02 | 0,00 |
| Gross social excl. (HY060) | 99,98 | 0,02 | 0,00 |
| Gross housing allowances (HY070) | 99,98 | 0,02 | 0,00 |
| Gross inter-HH cash received (HY080) | 98,79 | 1,21 | 0,00 |
| Alemonies received (HY081) | 99,24 | 0,76 | 0,00 |
| Gross interest repayments (HY100) | 99,98 | 0,02 | 0,00 |
| Gross Income under 16 (HY110) | 99,98 | 0,02 | 0,00 |
| Gross taxes on wealth (HY120) | 99,98 | 0,02 | 0,00 |
| Gross inter-HH cash paid (HY130) | 98,81 | 1,19 | 0,00 |
| Alemonies paid (HY131) | 99,46 | 0,54 | 0,00 |
| Gross tax on income (HY140) | 99,98 | 0,02 | 0,00 |
| Gross employee cash income (PY010) | 98,34 | 1,66 | 0,00 |
| Gross non-cash income (PY020) | 98,98 | 1,02 | 0,00 |
| Gross company car (HY021) | 99,98 | 0,02 | 0,00 |
| Gr. employer's soc. Ins. contrib. (PY030) | 99,98 | 0,02 | 0,00 |
| Gr. contrtib. to ind. pension plans (PY035) | 99,98 | 0,02 | 0,00 |
| Gross self employment (PY050) | 99,98 | 0,02 | 0,00 |
| Gross unemployment benefits (HY090) | 99,98 | 0,02 | 0,00 |
| Gross old-age benefits (PY100) | 99,98 | 0,02 | 0,00 |
| Gross survivor benefits (PY110) | 99,98 | 0,02 | 0,00 |
| Gross sickness benefits (PY120) | 99,98 | 0,02 | 0,00 |
| Gross disability benefits (PY130) | 99,98 | 0,02 | 0,00 |
| Gross education allowances (PY140) | 99,98 | 0,02 | 0,00 |

Table 2.3.3.5.B Total item nonresponse and number of observations

|  | Valid N | nonresp |
| :---: | :---: | :---: |
| Males | 3351 | 1 |
| Females | 3266 | 0 |
| Employed | 4800 | 0 |
| Unemployed | 46 | 0 |
| Inactive | 1306 | 1 |
| Under 25 | 1391 | 0 |
| 25-34 | 1062 | 0 |
| 35-44 | 1159 | 1 |
| 45-54 | 1324 | 0 |
| 55-64 | 877 | 0 |
| 65+ | 804 | 0 |
| Owner | 6014 | 0 |
| Tenant | 603 | 1 |
| Male under 25 | 758 | 0 |
| Male 25-34 | 539 | 0 |
| Male 35-44 | 567 | 1 |
| Male 45-54 | 643 | 0 |
| Male 55-64 | 458 | 0 |
| Male 65+ | 386 | 0 |
| Female under 25 | 633 | 0 |
| Female 25-34 | 523 | 0 |
| Female 35-44 | 592 | 0 |
| Female 45-54 | 681 | 0 |
| Female 55-64 | 419 | 0 |
| Female 65+ | 418 | 0 |
| Male employed | 2553 | 0 |
| Male unemployed | 24 | 0 |
| Male inactive | 539 | 1 |
| Female employed | 2247 | 0 |
| Female unemployed | 22 | 0 |
| Female inactive | 767 | 0 |
| One person under 64 years | 268 | 1 |
| One person, 65 years or older | 153 | 0 |
| One person male | 203 | 1 |
| One person female | 218 | 0 |
| One person total | 421 | 1 |
| Two adults under 65 no dependent children | 890 | 0 |
| Two adults, no dependent children | 618 | 0 |
| Other, no dependent children | 728 | 0 |
| Single parent, one or more dependent child | 222 | 0 |
| Two adults, 1 dependent child | 853 | 0 |
| Two adults, 2 dependent children | 959 | 0 |
| Two adults, 3 or more dependent children | 804 | 0 |
| Other households with dependent children | 1091 | 0 |
| Households without dependent children | 2657 | 1 |

## Equvalized disposable income

Item nonresponse for Equivalized disposable income. The information for the income variables were mainly collected through registers. Only information for HY080, HY130, PY020 and PY021 was received from the interview. Nonresponse for each income variable is shown in table 2.3.3.5.A.

### 2.4. Mode of data collection

All interviews were done through telephone with the aid of the Blaise software. One week before the start of data collection Statistics Iceland sent a letter to the sampled individuals explaining the purpose of the survey and requesting their cooperation.

Instead of asking about the amounts paid for electricity and heat (which are a part of variable HH070, Total Housing cost) imputations are used based on the HBS (Household Budget Survey). The reason is that it is our belief that people often do not know the amounts they pay for heating and electricity. These bills are often paid automatically through credit cards or automatically taken out of peoples' bank accounts. Some people hardly ever see the bills. Length of the intervals the amounts apply to have also sometimes been hard to establish ( 1 month, 3 months ect). The HBS (Household budget survey) on the other hand is a face to face survey where the respondents are asked in advance to prepare by keeping bills or bank transcripts handy.

The distribution of the selected respondents, household members aged 16 or over, and nonselected household members by data status (RB250) and by type of interview (RB260) is shown in the tables below.

Table 2.4 A Distribution of household members age 16 or over by data status (RB250)

| Rot. Group | Data status | Sel_resp | Non_sel | All <br> hhmembers $16+$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 Only registers (12) | 0 | 15 | 15 |
|  | Registers and interview (13) | 794 | 1046 | 1840 |
| 2 | Only registers (12) | 0 | 9 | 9 |
|  | Registers and interview (13) | 707 | 892 | 1599 |
| 3 | 3 Only registers (12) | 0 | 5 | 5 |
|  | Registers and interview (13) | 678 | 859 | 1537 |
| 4 | Only registers (12) | 0 | 4 | 4 |
|  | Registers and interview (13) | 708 | 901 | 1609 |
| Total |  | 2887 | 3731 | 6618 |

Table 2.4 B Distribution of household members age 16 or over by type of interview (RB260)

|  |  |  | All |
| :--- | :--- | :--- | :--- |
| Rot. | Type of |  | hhmembers |
| Group | interview | Sel_resp | Non_sel |
| $16+$ |  |  |  |


| 1 | CATI (3) | 794 | 1046 | 1840 |
| ---: | ---: | ---: | ---: | ---: |
| 2 | CATI (3) | 707 | 892 | 1599 |
| 3 CATI (3) | 678 | 859 | 1537 |  |
|  | 4 CATI (3) | 708 | 901 | 1609 |
| Total |  | 2887 | 3698 | 6585 |

### 2.5. Imputation procedure



Imputation was applied when dealing with amounts or working hours and we knew that these amounts were paid or received but did not have the amount or the number. Not imputing would systematically underestimate the amount.

### 2.6. Imputed rent

Imputed rent was first delivered with the 2007 data. The method used was the same as for the Icelandic HBS (Household budget survey). Market value of dwellings are received from housing registers: This market value is used to produce imputed rent with the formula:PH * $[\mathrm{r}(1+\mathrm{r}) \mathrm{N}] /[$
$(1+r) \mathrm{N}-1]$. Where PH is the market value of the dwelling, $\mathrm{r}=$ real interest $=4 \%, \mathrm{~N}=$ lasting time of property $=80$ years.

### 2.7 Company cars

In 2007, a question asking for company car was included in the questionnaire. Data on income are received from tax register. The information from the tax register do not distinghish between company car and other income.

## 3. Comparability

### 3.1. Basic concepts and definitions

The reference population
The reference population is persons aged 16 years or more at December 31st in the year 2007, living in private households.

The private household definition
A private household is defined as individuals that share food, meaning that they either do not pay for their food or that they share expenses for food. The definition does not require that they eat at the same times or that they are related.

The household membership
Persons are considered as household members if they spend most of their nights at the address of the household.
Individuals that are temporarily away (not having a private address elsewhere) and will return to the household are considered as household members. As example of this are children in boarding schools, fishermen, individuals admitted to hospitals or imprisoned and those that are working for longer periods away from home.

The income reference period
The income reference period is the calendar year 2007.
The period for taxes on income and social insurance contributions
The period for taxes on income and social insurance contributions is the calendar year 2007.
The reference period for taxes on wealth
The reference period for taxes on wealth is the calendar year 2007.
The lag between the income reference period and current variables
The income variables are collected from registers and the interval between the end of the income reference period and the time of interview for current variables is maximum four and a half months.

The total duration of the data collection of the sample
The interviews were carried out between $19^{\text {th }}$ of February and $6^{\text {th }}$ of April 2008.
Basic information on activity status during the income reference period

Table 3.1 Activity status of persons 18 years or older

|  | N | $\%$ |  |
| :--- | ---: | ---: | :---: |
| 1 Working | 4800 | 76,45 |  |
| 2 Unemployed | 46 | 0,73 |  |
| 3 Retired | 767 | 12,22 |  |
| 4 Other |  |  |  |
| inactive | 540 | 8,60 |  |
| 9 Not |  |  |  |
| responded | 126 | 2,01 |  |
| Total | 6279 | 100,00 |  |

### 3.2. Components of income

# 3.2.1 Differences between the national definitions and standard EU-SILC definitions, and an assessment of the consequences of the differences mentioned will be reported for the following target variables. 

This section gives an overview of how income data from registers have been organised in order to be comparable to the income concepts outlined in the SILC guidelines. In addition references are made to any departures from these guidelines.
All income data derived from registers are recorded gross at component level. All income data are collected at the individual level (i.e. the person registered as the receiver of the income). This also concerns typically "household" related incomes such as housing benefits and social assistance.

Total household gross income (HY010)
The sum of all income components:
HY040G+HY050G+HY060G+HY070G+HY080G+HY090G
Plus the sum for all household members of:
PY010G+PY020G+PY050G+PY090G+PY100G+PY110G+PY120G+PY130G+PY140G.
Total disposable household income (HYO20)
Defined as total gross income (HY100G+HY130G+HY140G) minus (HY120G+HY130+ HY140G)

## Imputed rent (HY030)

The method used was the same as for the Icelandic HBS (Household budget survey). Market value of dwellings are received from housing registers: This market value is used to produce imputed rent with the formula:PH * $[\mathrm{r}(1+\mathrm{r}) \mathrm{N}] /[(1+\mathrm{r}) \mathrm{N}-1]$. Where PH is the market value of the dwelling, $\mathrm{r}=$ real interest $=4 \%, \mathrm{~N}=$ lasting time of property $=80$ years.

Total disposable household income before social transfers except old-age and survivor's benefits (HY022)
Defined as HY020 minus the sum for all household members of:
(PY090N+PY120N+PY130N+PY140N) + HY050N+HY060N+HY070N

Total disposable household income before social transfers including old-age and survivor's benefits (HY023)
Defined as HY020 minus the sum for all household members of:
(PY090N+PY100N+PY110N+PY120N+PY130N+PY140N) + HY050N+HY060N+HY070N
Income from rental of property or land (HY040)
Income from hiring out property not contacted to business activity. Deviates from SILC definitions in that no information is available in the register on interest repayments, maintenance, insurance and other charges.

Family/children-related allowances (HY050)
Includes the following income components:

- Family allowance
- Maternity allowance (birth grant)
- Single parent's allowance

Social assistance (HY060)
Includes the total amount received in social assistance.
Housing allowances (HY070)
Includes rent benefits granted to tenants and owners.
Regular inter-household cash transfers received - (HY080)
Includes alimonies received. Information on regular private cash support received by children from parents living in a separate household is included from interview. The same goes for other inter household cash transfers received.

Interest, dividends, profit from capital investment in unincorporated business (HY090);
Interest and dividends are taxable income.
Income received by people aged under 16 (HY110)
Includes the following income components:

- Interests and dividends.

Those are registered in one sum on parent's tax return. If more than one child is in the household it is divided equally between the children.

- Children with income.

Interest repayments on mortgage (HY100)
As interest repayments on mortgage are used for calculating fiscal benefits to owner-occupiers are to be found in registers.

Regular taxes on wealth (HY120)
As the taxes are paid in the following year information is sought in registers from the year before.

## Regular inter-household cash transfers paid (HY130)

Information on alimonies paid and regular private cash support to children from parents living in a separate household is included from interview. The same goes for other inter household cash transfers received.

Total Tax on income and social contribution (HY140) It includes assessed income, wealth taxes and social contributions.

Repayment/receipts for tax adjustment (HY145)
It is included in HY140.

## Employee cash or near cash income (PY010) <br> Deviation from the SILC concept:

It is not possible to separate from employee cash income redundancy compensations that should be included under unemployment benefits. The same goes for wages and salaries during sickness, which is a major part of sickness benefits paid in Iceland.

## Non-Cash employee income (PY020G)

The information was retrived through the questionnaire.
Company car (PY021G)
The information was retrived through the questionnaire.

## Employer's social insurance contribution (PY030G)

The employer's social insurance contribution was calculated based on the incom received from the tax register.

Contribution to individual private pension plans (PY035G)
The contribution is usually a percentage of person's income. We have the income amount from the tax register and ask the percentage in the questionnaire.

Cash benefits or losses from self-employment (PY050)
Entrepreneurial income is collected net in register data. Royalties are registered as "other income" and not possible to separate and not include here.

Unemployment benefits (PY090)
Deviation from the SILC concept:
It is not possible to separate from employee cash income (PY010) redundancy compensations that should be included here or in PY100.

## Old-age function (PY100)

Includes the following income components:

- Old age pension from social security scheme (basic pension).
- Old age pension from compulsory private pension funds (employment pension).

Survivors' function (PY110)
Includes the following income components:

- Survivors' pension from social security scheme.
- Survivors' pension from compulsory private pension funds.
- Death grants.

Social benefits in the sickness (PY120)
All sickness benefits that are included in wages and salaries cannot be specified in registers and are included in PY010.

Disability benefits (PY130);
Includes the following income components:

- Disability benefits and pension from social security scheme (basic pension).
- Disability benefits and pension from compulsory private pension funds (employment pension).


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

Tax register is use for all income variables except for HY080, HY130, PY020 and PY021 (Regular inter-household cash transfer received and paid). For those two variables information are collected through the interview. Those are also the only income variables where imputation was used.

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

The register data only report gross income at component level. Total assessed taxes and contributions to social security are collected separately from tax registers.

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

All income data are recorded gross at component level.

### 3.3 Tracing rules

In Iceland a respondent is selected from the national register. Whoever lives with the selected respondent is also included in the survey. If the composition of the households of the selected respondent changes between waves we do not trace other houshold members. We only trace the selected respondent and if he or she has new household-partners they will be included in the survey. The information used for tracing are received from the national register, information on phone numbers are received from the largest phone company in Iceland. Information from former household members are also used to help locate selected respondents if the selected respondent has moved. All data are collected through telephone.

## 4. Coherence

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

With the exception of inter-household transfers all the income data in SILC are from register. Hence, in our opinion, there is no point in comparing the results with external sources since the source we would compare with is the source used in SILC.

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