

# **FINAL QUALITY REPORT**

**EU-SILC-2009**

**Iceland**

## Table of Contents

1. COMMON LONGITUDINAL EUROPEAN UNION INDICATORS BASED ON THE LONGITUDINAL COMPONENT OF EU-SILC .....	4
2. Accuracy.....	4
2.1. Sample design .....	4
2.1.1 Type of sampling.....	4
2.1.2 Sampling units.....	4
2.1.3 Stratification and sub-stratification criteria.....	4
2.1.4 Sample size and allocation criteria.....	4
2.1.5 Sample selection schemes .....	4
2.1.6 Sample distribution over time .....	4
2.1.7 Renewal of sample: Rotational groups.....	5
2.1.8. Weighting .....	5
2.1.8.1 Design factor .....	5
2.1.8.2 Nonresponse adjustments .....	5
2.1.8.3 Adjustments to external data .....	6
2.1.8.4 Final longitudinal weights.....	6
2.1.8.5 Longitudinal nonresponse, wave attrition between 2004 and 2005 .....	6
2.1.8.6 Adjustments to external data .....	6
2.1.8.7 Final longitudinal weights.....	6
2.1.8.8. Final cross sectional weight .....	6
2.1.9 Substitutions .....	6
2.2 Sampling errors .....	6
2.2.1. Standard errors and effective sample size .....	6
2.3 Nonsampling errors .....	12
2.3.1 Sampling frame and coverage errors.....	12
2.3.2 Measurement and processing errors .....	12
2.3.2.1 Design errors .....	12
Longitudinal variables.....	13
2.3.2.2. Interviewer and processing errors .....	14
2.3.3. Nonresponse errors.....	14
2.3.3.1 Achieved sample size .....	14
2.3.3.2.A. Unit nonresponse.....	16
2.3.3.3 Distribution of households .....	25
Table 2.3.3.4.A. Distribution of persons for membership status (RB110) .....	26
2.3.3.5. Item nonresponse.....	27
2.4. Mode of data collection.....	31
2.5. Imputation procedure .....	32
2.6. Imputed rent .....	33
2.7 Company cars.....	33
3. Comparability.....	33
3.1. Basic concepts and definitions .....	33
3.2. Components of income.....	34
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.....	34
3.2.2. The source or procedure used for the collection of income variables.....	37
3.2.3. The form in which income variables at component level have been obtained .....	37
3.2.4. The method used for obtaining income target variables in the required form (i.e. as gross values).....	37
3.3 Tracing rules.....	37
4. Coherence.....	37

4.1. Comparison of income target variables and number of persons who receive income from each 'income component', with external sources .....	38
5. Index.....	38

# **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 2009 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 4,144 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 2006. 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		t+1		t+2		t+3	
Wave number	Number in sample	Wave number	Number in sample	Wave number	Number in sample	Wave number	Number in 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

Notes:

	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
	Those drawn new in sample year t+1
	Those drawn new in sample year t+2
	Those drawn new in sample year t+3

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 2006 will be 20 years old in 2009 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:

$$DB080 = \frac{1}{n_{16+}}$$

Where

$n_{16+}$  = 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  $\frac{1}{4}$  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 4.144 households in the 2009 sample. During the field period, 172 of these proved to be non-eligible (either deceased, living in institutions or emigrated), thus giving a net sample of 3.972 households. Interviews were completed for 2.903 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 2009**

Wave	Variable	Mean	Before imp	After imp	SE mean
1	HY010	11461938	1776	1776	221518
	HY020	8548562	1776	1776	177460
	HY022	8066124	1776	1776	180154
	HY023	7495079	1776	1776	182511
	HY040G	880375	1776	1776	95443
	HY090G	1777393	1776	1776	162277
	HY050G	344024	1776	1776	18971
	HY060G	364473	1776	1776	108644
	HY070G	202199	1776	1776	4697
	HY080G	462941	1749	1776	16710
	HY081G	480533	1749	1776	17310
	HY100G	757927	1776	1776	18283
	HY110G	159872	1776	1776	10232
	HY120G	85261	1776	1776	885
	HY130G	365425	1744	1776	14119
	HY131G	393558	1744	1776	12569
	HY140G	2786917	1776	1776	53239
	PY010G	3529820	1776	1776	84609
	PY020G	279592	1744	1776	19517
	PY021G	573846	1762	1776	48252
	PY050G	1181485	1776	1776	114605
	PY090G	344460	1776	1776	31198
	PY100G	2057418	1776	1776	116759
	PY110G	554726	1776	1776	80355
	PY120G	206150	1776	1776	.
	PY130G	1641770	1776	1776	121933
	PY140G	162766	1776	1776	12925
2	HY010	11619909	1697	1697	274612
	HY020	8463879	1697	1697	195503
	HY022	8020952	1697	1697	197807
	HY023	7445289	1697	1697	200542
	HY040G	1108419	1697	1697	98986
	HY090G	1532734	1697	1697	172386
	HY050G	356362	1697	1697	17427
	HY060G	287346	1697	1697	52981
	HY070G	198019	1697	1697	7672
	HY080G	531516	1674	1697	26740
	HY081G	541993	1674	1697	27500
	HY100G	770305	1697	1697	18541
	HY110G	125055	1697	1697	7468
	HY120G	87232	1697	1697	983
	HY130G	413516	1662	1697	20824
	HY131G	484775	1662	1697	25183



	HY140G	3009051	1697	1697	85054
	PY010G	3718157	1697	1697	82910
	PY020G	310975	1682	1697	19678
	PY021G	617393	1660	1697	44142
	PY050G	1107789	1697	1697	108787
	PY090G	297703	1697	1697	33748
	PY100G	2040442	1697	1697	84863
	PY110G	847352	1697	1697	112474
	PY120G	.	1697	1697	.
	PY130G	1805014	1697	1697	123107
	PY140G	317890	1697	1697	150468
3	HY010	10987114	1545	1545	205805
	HY020	8102875	1545	1545	153228
	HY022	7593921	1545	1545	156489
	HY023	7025328	1545	1545	158441
	HY040G	849588	1545	1545	68083
	HY090G	1398504	1545	1545	117959
	HY050G	379899	1545	1545	22086
	HY060G	179690	1545	1545	35470
	HY070G	219929	1545	1545	10811
	HY080G	467289	1521	1545	21802
	HY081G	475608	1525	1545	21891
	HY100G	820295	1545	1545	20342
	HY110G	106692	1545	1545	10651
	HY120G	84808	1545	1545	973
	HY130G	366804	1528	1545	15686
	HY131G	431054	1531	1545	18170
	HY140G	2753025	1545	1545	61763
	PY010G	3691423	1545	1545	115573
	PY020G	294579	1528	1545	17471
	PY021G	559433	1531	1545	40662
	PY050G	1096310	1545	1545	108785
	PY090G	326761	1545	1545	44468
	PY100G	1908045	1545	1545	81660
	PY110G	863749	1545	1545	312198
	PY120G	149295	1545	1545	57274
	PY130G	1658411	1545	1545	109253
	PY140G	153057	1545	1545	13198
4	HY010	11403669	1503	1503	228762
	HY020	8404530	1503	1503	166895
	HY022	7922494	1503	1503	169078
	HY023	7214970	1503	1503	174931
	HY040G	813292	1503	1503	59004
	HY090G	1501654	1503	1503	113411
	HY050G	332702	1503	1503	18645
	HY060G	458503	1503	1503	84419
	HY070G	238251	1503	1503	37497
	HY080G	507380	1486	1503	37884
	HY081G	513957	1486	1503	39102

HY100G	801022	1503	1503	18028
HY110G	78354	1503	1503	4547
HY120G	87165	1503	1503	1043
HY130G	377288	1483	1503	17510
HY131G	434149	1483	1503	17767
HY140G	2872379	1503	1503	69086
PY010G	3855689	1503	1503	126205
PY020G	277922	1472	1503	18059
PY021G	605420	1484	1503	51281
PY050G	1197764	1503	1503	135400
PY090G	327036	1503	1503	39272
PY100G	2102604	1503	1503	117022
PY110G	954327	1503	1503	193445
PY120G	473742	1503	1503	424818
PY130G	1765583	1503	1503	147678
PY140G	113524	1503	1503	16785

**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 2009 by wave**

Wave	Variable	Mean	Count	Valid N	SE Mean
1	1 hh member	2.799.464	120	118	174.595
1	2 hh members	4.835.869	428	428	303.135
1	3 hh members	3.970.099	363	363	96.031
1	4+ hh members	3.927.263	865	865	95.629
1	<25 years	3.769.190	403	403	131.867
1	25-34 years	3.241.934	283	282	89.735
1	35-44 years	3.851.231	310	309	182.448
1	45-54 years	4.271.349	357	357	178.351
1	55-64 years	5.462.718	226	226	462.158
1	65+ years	4.343.311	197	197	300.409
1	Male	4.138.140	916	914	126.901
1	Female	4.018.671	860	860	128.924
2	1 hh member	2.781.789	131	130	125.059
2	2 hh members	4.476.997	395	395	142.262
2	3 hh members	3.759.644	393	391	76.417
2	4+ hh members	4.151.425	778	778	135.980
2	<25 years	3.979.690	357	357	188.445
2	25-34 years	3.449.686	249	248	90.569
2	35-44 years	3.838.084	294	294	214.662
2	45-54 years	4.166.158	357	356	164.503
2	55-64 years	4.898.819	246	245	185.366
2	65+ years	3.823.942	194	194	167.256
2	Male	4.112.812	849	847	108.871
2	Female	3.950.795	848	847	100.913
3	1 hh member	2.912.748	106	106	204.508
3	2 hh members	4.541.212	398	398	197.609
3	3 hh members	4.016.304	348	348	94.976
3	4+ hh members	3.817.652	693	693	98.579
3	<25 years	3.676.217	285	285	117.924
3	25-34 years	3.534.367	249	249	140.675
3	35-44 years	3.764.264	277	277	165.846
3	45-54 years	4.069.063	301	301	125.927
3	55-64 years	4.840.774	216	216	223.183
3	65+ years	4.233.110	217	217	298.961
3	Male	4.063.927	774	774	106.496
3	Female	3.909.184	771	771	99.308
4	1 hh member	3.289.770	98	95	239.591
4	2 hh members	4.332.050	423	423	137.422
4	3 hh members	4.113.058	338	338	143.429
4	4+ hh members	4.156.739	644	644	123.513

4	<25 years	3.899.410	285	285	160.585
4	25-34 years	3.787.402	247	247	172.660
4	35-44 years	3.978.195	247	246	225.973
4	45-54 years	4.528.423	291	291	164.045
4	55-64 years	4.681.966	218	217	197.371
4	65+ years	3.985.634	215	214	174.577
4	Male	4.162.984	765	764	104.367
4	Female	4.119.048	738	736	107.732

As we do not have resources take the design of the survey and the calibration into account in the calculation 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 2008. 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 were made to fix this but problems still remained since for those cases when the „selected respondent“ moved from one household to another there was confusion and information was 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 as RB140.

RB190: Same 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 have 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 2009 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	2005	Wave 1	685	1590	2061
	2005	Wave 2	705	1610	2152
	2005	Wave 3	713	1645	2176
	2005	Wave 4	742	1676	2209
	2005	Total	2845	6521	8598
2006	2006	Wave 1	705	1636	2132
	2006	Wave 2	704	1600	2068
	2006	Wave 3	715	1630	2191
	2006	Wave 4	748	1701	2264
	2006	Total	2872	6567	8655
2007	2007	Wave 1	794	1855	2432
	2007	Wave 2	707	1608	2099
	2007	Wave 3	678	1542	1986
	2007	Wave 4	708	1613	2127
	2007	Total	2887	6618	8644
2008	2008	Wave 1	768	1776	2290
	2008	Wave 2	759	1697	2228
	2008	Wave 3	700	1545	2058
	2008	Wave 4	676	1503	1969
	2008	Total	2903	6521	8545

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)

$$NRh = (1 - Ra * Rh) * 100$$

Where

$$Ra = \frac{\text{Number of addresses successfully contacted}}{\text{Number of valid addresses selected}}$$

$$Ra = \frac{\sum (DB120 = 11)}{\sum (DB120 = all) - \sum (DB120 = 23)} = \frac{3939}{4144 - 172} = 1$$

$$Rh = \frac{\text{Number of household interviews completed and accepted for database}}{\text{Number of valid addresses selected}}$$

$$Rh = \frac{\sum (DB130 = 1)}{\sum (DB130 = all)} = \frac{2903}{3972} = 0.7309$$

$$NRh = (1 - 0.7329) * 100 = 26.71$$

### Individual nonresponse rates (NRp)

$$NRp = (1 - (Rp)) * 100$$

Where

$$Rp = \frac{\text{Number of personal interviews completed}}{\text{Number of eligible individuals in households where interviews were completed and accepted for database}}$$

$$Rp = \frac{6521}{6521} = 1$$

$$NRp = 1 - (1 - (Rp)) * 100 = 1 - (0) * 100 = 100$$

### Overall individual nonresponse rates (\*NRp)

$$*NRp = (1 - (Ra * Rh * Rp)) * 100 = (1 - (1 * 0.2691 * 1)) * 100 = 73.01$$

## 2.3.3.2.B Unit nonresponse by rotational group

	Group 2	Group 3	Group 4
Ra	1,00	1,00	1,00
Rh	0,71	0,73	0,74
NRh	0,29	0,27	0,26
Rp	1,00	1,00	1,00
NRp	0,29	0,27	0,26



**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 respondent 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 4**

Group 4		DB135=1	DB130=21	DB130=22	DB130=23	DB120=23	DB110=3_7	Total
Wave 1	DB135=1	777	138	75	12	20	0	1022
	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	777	138	75	12	20	0	1022

#### **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	591	138	50	7	7	0	793
	DB135=2	0	0	0	0	0	0	0
Wave 2	DB110=8	0	0	0	0	0	0	0
	DB110=9	11	2	1	0	0	0	14
	Total	602	140	51	7	7	0	807

#### **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	666	146	45	11	6	0	874
	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	666	146	45	11	6	0	874

### Wave response rates. Percentages

	Wave resp.rate	Refusal rate	No contact	Total
Group 2	74,60	17,35	8,05	100
Group 3	76,20	16,70	7,09	100
Group 4	76,03	13,50	10,47	100

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

	Longitudinal follow up rates	Follow up ratio	Achieved sample size ratio
Group 2	75,91	83,10	75,91
Group 3	82,61	82,61	76,20
Group 4	84,54	84,54	76,03

### Household response rates: Comparison of results codes between wave t and wave t-1

#### 2.3.3.2.D: Other waves

##### Group 2

Group 2	DB135 = 1	DB130 = 21	DB130=22	DB130=23	DB120=23	DB110=3, 4, 5, 6, 7	Total
Wave 1-2							
1: Wave 1, DB135 = 1	591	138	50	7	7	0	793
2: Wave 1, DB135 = 2	0	0	0	0	0	0	0
3: Wave 2, DB110 = 8	0	0	0	0	0	0	0
4: Wave 2, DB110 = 9	11	2	1	0	0	0	14
Total	602	140	51	7	7	0	807

#### 2.3.3.2.D Other waves

##### Group 2

Group 2	DB135 = 1	DB130 = 21	DB130=22	DB130=23	DB120=23	DB110=3, 4, 5, 6, 7	Total
Wave 2-3							
1: Wave 1, DB135 = 1	542	39	0	0	0	0	581
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	7	0	0	0	7
8: DB130 = 23	0	0	0	2	0	1	3

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
	542	39	7	2	0	1	591

#### Group 2

Wave 3-4	DB135 = 1	DB130 = 21	DB130=22	DB130=23	DB120=23	DB110=3, 4, 5, 6, 7	Total
1: Wave 1, DB135 =							
1	520	31	0	0	0	0	551
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	8	0	0	0	8
8: DB130 = 23	0	0	0	3	0	0	3
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
	520	31	8	3	0	0	562

### Group 3

#### Group 3

Wave 1-2	DB135 = 1	DB130 = 21	DB130=22	DB130=23	DB120=23	DB110=3, 4, 5, 6, 7	Total
1: Wave 1, DB135 =							
1	777	138	75	12	20	0	1022
2: Wave 1, DB135 =							
2	0	0	0	0	0	0	0
3: Wave 2, DB110 =							
8	0	0	0	0	0	0	0
4: Wave 2, DB110 =							
9	0	0	0	0	0	0	0
Total	777	138	75	12	20	0	1022

### 2.3.3.2.D

### Group 4

#### Group 4

Wave 1-2	DB135 = 1	DB130 = 21	DB130=22	DB130=23	DB120=23	DB110=3, 4, 5, 6, 7	Total
1: Wave 1, DB135 =							
1	666	146	45	11	6	0	874
2: Wave 1, DB135 =							
2	0	0	0	0	0	0	0
3: Wave 2, DB110 =							
8	0	0	0	0	0	0	0
4: Wave 2, DB110 =							
9	0	0	0	0	0	0	0
Total	666	146	45	11	6	0	874

#### Group 4

Wave 2-3	DB135 = 1	DB130 = 21	DB130=22	DB130=23	DB120=23	DB110=3, 4, 5, 6, 7	Total
1: Wave 1, DB135 =							
1	604	46	0	0	0	0	650
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	12	0	0	0	0
8: DB130 = 23	0	0	0	4	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
	604	46	12	4	0	0	650

### Wave response rates.

Wave 2-3	Wave resp.rate	Refusal rate	No contact	Total
Group 2	91,71	6,60	1,69	100
Group 3	92,92	7,08	2,46	102

Wave 3-4	Wave resp.rate	Refusal rate	No contact	Total
Group 2	92,53	5,52	1,96	100

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

Wave 1 - 2	Longitudinal follow-up rate	Follow- up ratio	Achieved sample size ratio
Group 2	91,71	91,71	93,29
Group 3	90,69	92,92	92,92

Wave 1 - 2	Longitudinal follow-up rate	Follow- up ratio	Achieved sample size ratio
Group 2	92,53	92,53	94,37

# Longitudinal response rate for persons

## 2.3.3.2.E Personal interview outcome.

### Group 4

Sample persons (RB100=1 and RB245 in ('1', '2', '3) forwarded from last wave								
		RB250	RB250	RB250	RB250	RB250	RB250	
Group 4		11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 1	777	0	0	0	0	0	777
RB110 = 1-2	Wave 1 to wave 2	661	0	0	0	0	0	661
Non sample persons								
		RB250	RB250	RB250	RB250	RB250	RB250	
Group 4		11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 1	1039	0	0	0	0	0	1039
RB110 = 1-2	Wave 1 to wave 2	755	0	0	0	0	0	755
Nonsample persons and sample persons								
		RB250	RB250	RB250	RB250	RB250	RB250	
Group 4		11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 1	1816	0	0	0	0	0	1816
RB110 = 1-2	Wave 1 to wave 2	1416	0	0	0	0	0	1416

### 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
RB110 = 1-2	Wave 2	666	0	0	0	0	0	666
RB110 = 1-2	Wave 2 to wave 3	604	0	0	0	0	0	604
RB110 = 1-2	Wave 3 to wave 4	560	0	0	0	0	0	560
Non sample persons								
		RB250	RB250	RB250	RB250	RB250	RB250	
Group 3		11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 2	880	0	0	0	0	0	880
RB110 = 1-2	Wave 2 to wave 3	701	0	0	0	0	0	701
RB110 = 1-2	Wave 3 to wave 4	628	0	0	0	0	0	628
Sample and nonsample persons								
		RB250	RB250	RB250	RB250	RB250	RB250	
Group 3		11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 2	1546	0	0	0	0	0	1546
RB110 = 1-2	Wave 2 to wave 3	1305	0	0	0	0	0	1305
RB110 = 1-2	Wave 3 to wave 4	1188	0	0	0	0	0	1188

**Group 2**

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

		RB250	RB250	RB250	RB250	RB250	RB250	
	Group 2	11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 1	591	0	0	0	0	0	591
RB110 = 1-2	Wave 1 to wave 2	553	0	0	0	0	0	553
RB110 = 1-2	Wave 2 to wave 3	520	0	0	0	0	0	520
RB110 = 1-2	Wave 3 to wave 4	481	0	0	0	0	0	481

Non sample persons

		RB250	RB250	RB250	RB250	RB250	RB250	
	Group 2	11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 1	789	0	0	0	0	0	789
RB110 = 1-2	Wave 1 to wave 2	658	0	0	0	0	0	658
RB110 = 1-2	Wave 2 to wave 3	594	0	0	0	0	0	594
RB110 = 1-2	Wave 3 to wave 4	539	0	0	0	0	0	539

Sample and nonsample persons

		RB250	RB250	RB250	RB250	RB250	RB250	
	Group 2	11, 12, 13	21	23	31	32	33	Total
RB110 = 1-2	Wave 1	1380	0	0	0	0	0	1380
RB110 = 1-2	Wave 1 to wave 2	1211	0	0	0	0	0	1211
RB110 = 1-2	Wave 2 to wave 3	1114	0	0	0	0	0	1114
RB110 = 1-2	Wave 3 to wave 4	1020	0	0	0	0	0	1020

**Wave response rate****Group 4**

Wave response rate of sample persons =1

Wave response rate of nonsample persons =1

Longitudinal follow up rate =1

RB250 takes only values of 12 and 13 so Rate (RB250=21) = 0

Achieved sample size ratio for sample persons

Wave 1 to wave 2 0,85

Achieved sample size ratio for sample and non sample persons

Wave 1 to wave 2 0,73

Achieved sample size ratio for non sample persons

Wave 1 to wave 2 0,78

### Group 3

Wave response rate of sample persons =1

Wave response rate of nonsample persons =1

Longitudinal follow up rate =1

RB250 takes only values of 12 and 13 so Rate (RB250=21) = 0

Achieved sample size ratio for sample persons

Wave 2 to wave 3	0,91
------------------	------

Wave 3 to wave 4	0,93
------------------	------

Achieved sample size ratio for sample and non sample persons

Wave 2 to wave 3	0,80
------------------	------

Wave 3 to wave 4	0,90
------------------	------

Achieved sample size ratio for non sample persons

Wave 2 to wave 3	0,84
------------------	------

Wave 3 to wave 4	0,91
------------------	------

### Group 4

Wave response rate of sample persons =1

Wave response rate of nonsample persons =1

Longitudinal follow up rate =1

RB250 takes only values of 12 and 13 so Rate (RB250=21) = 0

Achieved sample size ratio for sample persons

Wave 1 to wave 2	0,94
------------------	------

Wave 2 to wave 3	0,94
------------------	------

Wave 3 to wave 4	0,93
------------------	------

Achieved sample size ratio for sample and non sample persons

Wave 1 to wave 2	0,83
------------------	------

Wave 2 to wave 3	0,90
------------------	------

Wave 3 to wave 4	0,91
------------------	------

Achieved sample size ratio for non sample persons

Wave 1 to wave 2	0,88
------------------	------

Wave 2 to wave 3	0,92
------------------	------

Wave 3 to wave 4	0,92
------------------	------

		DB110 = 1	DB110 = 2	DB110 = 3	DB110 = 4	DB110 = 5	DB110 = 7	DB110 = 9	
Group 1	Wave 1	1	0	0	0	0	0	2176	2177
		0,05%	0,00%	0,00%	0,00%	0,00%	0,00%	99,95%	100,00%
	Wave 2	2	1540	305	0	0	0	65	1912
Group 3	Wave 2	3	1515	322	0	0	0	50	1890
		0,16%	80,16%	17,04%	0,00%	0,00%	0,00%	2,65%	100,00%
	Wave 3	4	1487	245	6	2	6	0	1750
		0,23%	84,97%	14,00%	0,34%	0,11%	0,34%	0,00%	100,00%
	Wave 4	1	0	0	0	0	0	2096	2097
		0,05%	0,00%	0,00%	0,00%	0,00%	0,00%	99,95%	100,00%
Goup 4	Wave 1	2	1499	270	0	0	0	56	1827
		0,11%	82,05%	14,78%	0,00%	0,00%	0,00%	3,07%	100,00%
	Wave 2	3	1400	235	5	3	11	0	1657
		0,18%	84,49%	14,18%	0,30%	0,18%	0,66%	0,00%	100,00%
	Wave 3	1	0	0	0	0	0	2332	2333
		0,04%	0,00%	0,00%	0,00%	0,00%	0,00%	99,96%	100,00%

		DB120 = 11
Group 1	Wave 2	305
		100,00%
	Wave 3	322
		100,00%
Group 3	Wave 4	245
		100,00%
	Wave 2	270
		100,00%
Group 4	Wave 3	235
		100,00%
	Wave 2	274
		100,00%

### Household questionnaire result

		DB130 = 11	DB130 = 21	DB130 = 22	DB130 = 23	
Group 1	Wave 1	2008	113	52	2	2175
		92,32%	5,20%	2,39%	0,09%	100,00%
	Wave 2	1844	45	16	5	1910
		96,54%	2,36%	0,84%	0,26%	100,00%
	Wave 3	1840	25	16	6	1887
		97,51%	1,32%	0,85%	0,32%	100,00%
	Wave 4	1690	25	13	4	1732
		97,58%	1,44%	0,75%	0,23%	100,00%



Group 3	Wave 1	1873	144	61	7	2085
		89,83%	6,91%	2,93%	0,34%	100,00%
	Wave 2	1767	43	13	2	1825
		96,82%	2,36%	0,71%	0,11%	100,00%
	Wave 3	1591	33	8	3	1635
		97,31%	2,02%	0,49%	0,18%	100,00%
Group 3	Wave 1	2082	153	65	13	2313
		90,01%	6,61%	2,81%	0,56%	100,00%
	Wave 2	1888	47	14	4	1953
		96,67%	2,41%	0,72%	0,20%	100,00%

### Household interview acceptance

DB135 =  
1

Group 1	Wave 1	2008
		100,00%
	Wave 2	1844
		100,00%
	Wave 3	1840
		100,00%
	Wave 4	1690
		100,00%
Group 3	Wave 1	1873
		100,00%
	Wave 2	1767
		100,00%
	Wave 3	1591
		100,00%
Group 3	Wave 1	2082
		100,00%
	Wave 2	1888
		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 away	132	130	94	106	462
Unable to 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	768	676	700	759	2903
Rejected	0	0	0	0	0
Total	768	676	700	759	2903

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)**

		RB110 = 1	RB110 = 2	RB110 = 3	RB110 = 4	RB110 = 5	RB110 = 6	RB120 = 4	
Group 4	Wave 1	2377	0	0	0	0	0	0	2377
		100,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	100,00%
	Wave 2	1857	85	24	74	72	0	2	2114
		87,84%	4,02%	1,14%	3,50%	3,41%	0,00%	0,09%	100,00%
Group 3	Wave 1	2022	0	0	0	0	0	0	2022
		100,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	100,00%
	Wave 2	1705	83	25	55	52	0	3	1923
		88,66%	4,32%	1,30%	2,86%	2,70%	0,00%	0,16%	100,00%
	Wave 3	1577	80	26	48	47	0	1	1779
		88,65%	4,50%	1,46%	2,70%	2,64%	0,00%	0,06%	100,00%
Group 2	Wave 1	1785	0	0	0	0	0	0	1785
		100,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	100,00%
	Wave 2	1548	62	31	0	0	0	0	1641
		94,33%	3,78%	1,89%	0,00%	0,00%	0,00%	0,00%	100,00%
	Wave 3	1433	68	20	44	39	0	5	1609
		89,06%	4,23%	1,24%	2,73%	2,42%	0,00%	0,31%	100,00%
	Wave 4	1316	51	21	55	52	1	2	1498
		87,85%	3,40%	1,40%	3,67%	3,47%	0,07%	0,13%	100,00%

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

		RB110 =
		5
Group 4	Wave 2	74
Group 3	Wave 2	55
Group 3	Wave 3	48
Group 2	Wave 3	44
Group 2	Wave 4	54

## 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 (HY010)	99,94	0,06	0,00
Total HH disp. Inc (HY020)	99,94	0,06	0,00
Total HH disp before (HY022)	99,94	0,06	0,00
Total HH disp. Including (HY023)	99,92	0,06	0,00
Gross imputed rent (HY030)	90,28	0,06	0,00
Gross Income from rental (HY040)	5,89	0,06	0,00
Gross income from investments (HY090)	71,71	0,06	0,00
Gross family allowences (HY050)	38,82	0,06	0,00
Gross social excl. (HY060)	2,65	0,06	0,00
Gross housing allowances (HY070)	27,96	0,06	0,00
Gross inter-HH cash received (HY080)	17,04	1,64	0,00
Alemonies received (HY081)	15,33	1,64	0,00
Gross interest repayments (HY100)	73,60	0,06	0,00
Gross Income under 16 (HY110)	14,41	0,06	0,00
Gross taxes on wealth (HY120)	88,96	0,06	0,00
Gross inter-HH cash paid (HY130)	13,80	1,10	0,00
Alemonies paid (HY131)	8,86	1,10	0,00
Gross tax on income (HY140)	99,85	0,06	0,00
Gross employee cash income (PY010)	84,12	0,00	0,00
Gross non-cash income (PY020)	26,95	0,00	0,00
Gross company car (HY021)	8,39	0,00	0,00
Gross employer's social insurance contrib. (PY030)	83,30	0,00	0,00
Gross contrtib. to individual private pension plans (PY035)	2,82	0,00	0,00
Gross self employment (PY050)	10,86	0,00	0,00
Gross unemployment benefits (HY090)	2,31	0,00	0,00
Gross old-age benefits (PY100)	11,41	0,00	0,00
Gross survivor benefits (PY110)	4,66	0,00	0,00
Gross sickness benefits (PY120)	0,27	0,00	0,00
Gross disability benefits (PY130)	4,49	0,00	0,00
Gross education allowances (PY140)	1,37	0,00	0,00

**Table 2.3.3.5.B Total item nonresponse and number of observations**

		Valid N	Nonresp
By sex	Males	3299	5
	Females	3214	3
By activiy	Employed	4687	6
	Unemployed	78	1
	Inactive	1265	1
By age	Under 25	1330	0
	25-34	1026	2
	35-44	1126	2
	45-54	1305	1
	55-64	904	2
	65+	822	1
By tenure status	Owner	5797	4
	Tenant	715	4
By age and sex	Male under 25	725	0
	Male 25-34	523	1
	Male 35-44	565	1
	Male 45-54	629	1
	Male 55-64	456	1
	Male 65+	401	1
	Female under 25	605	0
	Female 25-34	503	1
	Female 35-44	561	1
	Female 45-54	676	0
	Female 55-64	448	1
	Female 65+	421	0
Acticity and sex	Male employed	2468	5
	Male unemployed	39	0
	Male inactive	541	0
	Female employed	2219	1
	Female unemployed	39	1
	Female inactive	724	1
Household type	One person under 64 years	289	5
	One person, 65 years or older	159	1
	One person male	208	4
	One person female	240	2
	One person total	448	6
	Two adults under 65 no dependent children	894	0
	Two adults, no dependent children	636	0
	Other, no dependent children	591	0
	Single parent, one or more dependent child	231	0
	Two adults , 1 dependent child	936	2
	Two adults, 2 dependent children	1020	0
	Two adults, 3 or more dependent children	806	0
	Other households with dependent children	940	0
	Households without dependent children	2569	6
	Households with dependent children	3933	2

**Equivalized 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 non-selected 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 hhmembers 16+
1	12 Only from registers	0	11	11
	13 Interview and registers	768	997	1765
2	12 Only from registers	0	3	3
	13 Interview and registers	759	935	1694
3	12 Only from registers	0	12	12
	13 Interview and registers	700	833	1533
4	12 Only from registers	0	4	4
	13 Interview and registers	676	823	1499
Total		2903	3618	6521

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

Rot. Group	Type of interview	Sel_resp	Non_sel	All hhmembers 16+
1	CATI (3)	768	997	1765
2	CATI (3)	759	935	1694
3	CATI (3)	700	833	1533
4	CATI (3)	676	823	1499

Total	2903	3588	6491
-------	------	------	------

## 2.5. Imputation procedure

Variables where imputation was applied	2005 imputed	2005 total	2006 imputed	2006 total	2007 imputed	2007 total	2008 imputed	2008 total	2009 imputed	2009 total
Utility bills in Total housing cost (HH070)	2923	2923	2856	2856	2872	2872	2860	2860	2886	2886
Working hours (PL060)	35	4738	64	4698	108	4803	97	4935	57	4507
Rent (HH060)	30	368	33	374	14	354	22	349	18	395
Money from other households (HY080)	59	387	74	390	92	484	64	473	68	453
Alemoney from other households (HY081)					71	429	49	421	63	401
Money to other households (HY130)	67	434	86	472	71	399	59	426	74	451
Alemoney to other households (HY131)					43	259	34	262	43	242
Non cash employee income (PY020G)					110	8655	110	8644	114	8545
Company car (PY021G)					93	8655	67	8644	64	8545
Social insurance contribution (PY030G)					5470	5470	5521	5521	5501	5501

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:  $PH * [r(1+r)^N] / [(1+r)^N - 1]$ . Where PH is the market value of the dwelling, r = real interest = 4%, 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 distinguish 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 2008, 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 2008.

### The period for taxes on income and social insurance contributions

The period for taxes on income and social insurance contributions is the calendar year 2008.

### The reference period for taxes on wealth

The reference period for taxes on wealth is the calendar year 2008.

### 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 9<sup>th</sup> of February and 7<sup>th</sup> of Mai 2009.

Basic information on activity status during the income reference period

**Table 3.1 Activity status of persons 18 years or older**

	N	%
1 Working	4693	75,8
2 Unemployed	79	1,3
3 Retired	547	8,8
4 Other inactive	719	11,6
9 Not responded	157	2,5
Total	6195	100,0

### **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 (HY020)

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:  $PH * [r(1+r)^N] / [(1+r)^N - 1]$ . Where PH is the market value of the dwelling, r = real interest = 4%, 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)

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 retrieved through the questionnaire.

Company car (PY021G)

The information was retrieved through the questionnaire.

Employer's social insurance contribution (PY030G)

The employer's social insurance contribution was calculated based on the income 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).

#### Education related allowance (PY140)

It includes scholarship of various kinds and “educational alimony” received by children at the age of 18 to 20 years living with single parent (e.g. students).

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

Tax register is used for all income variables except for HY080, HY130, PY020 and PY021 (Regular inter-household cash transfer received and paid). For those two variables information is 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 household 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 is 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.

### **5. Index**

Equivalized, 29	Nonresponse, 5, 13, 29
Imputation, 31	Rotation, 5
Income, 34	Sampling, 4, 6, 11
Longitudinal, 6, 12, 16, 17, 19, 20	Stratification, 4