INTERMEDIATE QUALITY REPORT

EU-SILC-2011

Iceland

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1. Common cross-sectional EU indicators 2011 (income year 2010)

Indicators, confidence intervals and design effects were calculated in the survey package in R.

	Indicator	Conf.int	Est.number	Deff
A P10	157900	5700	30100	2
A P20	189700	3000	60200	2,4
A P30	212700	3700	90200	2,4
A P40	232700	3900	120300	2
A P50	256000	4400	150400	2,6
A P60	280800	4300	180500	2,3
A P70	309600	5900	210500	2,9
A P80	346100	7400	240600	2,4
A P90	409700	8700	270700	1,8
A.R.P.T. Threshold	153600	2700	300800	2,6
A.R.P.T. two with two children	322500	5600	300800	2,6
A1 Gini	23,6	1,2	0	3
A2 S80/S20	3,3	0,2	0	3,3
A3 Social exclusion	13,6	1,4	40900	3,8
A4 At risk of poverty	9,2	1,2	27700	3,9
A5 HH low work intensity	6	1	10000	2,3
A6 Severe mat.dep.	2	0,5	5900	3,3
B Thresh. 40	3,1	0,7	9300	3,6
B Thresh. 40 male	3,2	0,8	4700	2,5
B Thresh. 40 female	3	0,8	4500	2,8
B Thresh. 50	5,4	0,9	16300	3,7
B Thresh. 50 male	5,6	1	8400	2,5
B Thresh. 50 female	5,3	1,1	8000	2,7
B Thresh. 60	9,2	1,2	27700	3,9
B Thresh. 60 male	9	1,3	13500	2,4
B Thresh. 60 female	9,5	1,5	14200	2,9
B Thresh. 70	16,4	1,5	49200	3,8
B Thresh. 70 male	15,7	1,6	23600	2,4
B Thresh. 70 female	17	1,8	25600	2,7
C01-Total	9,2	1,2	27700	3,9
C02 -17	11,2	2,2	8800	3,1
C03 18-24	14,2	3,1	4300	2,4
C04 25-49	10,1	1,6	10300	2,2
C05 50-64	5,2	1,5	2800	2
C06 65+	4,3	1,8	1600	1,7
C07 a18+	8,5	1	18900	2,4
C08 a18-64	9,3	1,2	17300	2,5
C09 a0-64	9,9	1,3	26100	4,1
C10 -male	9	1,3	13500	2,4
C11 0-17 male	10,6	2,5	4200	2,1
C12 18-24 male	12,8	3,9	2000	2,2
C13 25-49 male	9,6	2	4900	1,7
C14 50-64 male	7,1	2,3	1900	1,8

C15 65+ male	3	1,9	500	1,4
C16 a18+ male	8,4	1,3	9300	1,8
C17 Ca18-64 male	9,4	1,5	8800	1,9
C18 a0-64 male	9,8	1,4	12900	2,5
C19 -female	9,5	1,5	14200	2,9
C20 0-17 female	11,9	2,9	4600	2,5
C21 18-24 female	15,7	4,4	2300	2
C22 25-49 female	10,6	2,1	5400	1,7
C23 50-64 female	3,3	1,4	900	1,4
C24 65+ female	5,5	2,6	1100	1,4
C25 a18+ female	8,6	1,3	9700	1,8
C26 a18-64 female	9,3	1,5	8600	1,9
C27 a0-64 female	10	1,6	13200	3,1
C30 a22_-Total	23,1	1,7	69400	3,9
C31 a22_0-17	30,1	3,1	23500	2,9
C32 a22_18-24	25,3	3,6	7600	2,1
C33 a22_25-49	24,7	2,2	25100	2,1
C34 a22_50-64	18,5	2,6	10000	2
C35 a22_65+	8,7	2,3	3200	1,6
C36 a22_a18+	20,6	1,5	46000	2,3
C37 a22_a18-64	23	1,7	42700	2,4
C38 a22_a0-64	25,1	1,9	66200	4,1
C39 a22_-male	22,8	1,9	34200	2,4
C40 a22_0-17 male	30,6	3,8	12100	2,1
C41 a22_18-24 male	22,9	4,5	3500	1,8
C41 a22_25-49 male	23	2,7	11600	1,5
C42 a22_50-64 male	20	3,4	5400	1,6
C43 a22_65+ male	9	3	1600	1,3
C44 a22_a18+ male	20	1,7	22100	1,7
C45 a22_a18-64 male	22,1	2	20500	1,7
C46 a22_a0-64 male	24,6	2	32600	2,5
C47 a22_-female	23,4	2	35200	2,6
C48 a22_0-17 female	29,6	3,8	11400	2,2
C49 a22_18-24 female	27,9	5	4000	1,7
C50 a22_25-49 female	26,5	2,8	13500	1,5
C51 a22_50-64 female	17	2,9	4600	1,4
C52 a22_65+ female	8,5	3	1700	1,3
C53 a22_a18+ female	21,2	1,8	23800	1,6
C54 a22_a18-64 female	23,9	2	22200	1,7
C55 a22_a0-64 female	25,6	2,2	33500	2,7
C60 a23_-Total	34,6	1,8	104000	3,5
C61 a23_0-17	32,4	3,1	25300	2,8
C62 a23_18-24	28,8	3,7	8600	2
C63 a23_25-49	27,3	2,3	27700	2
C64 a23_50-64	23,4	2,7	12700	1,9
C65 a23_65+	80,3	3,2	29800	1,5
C66 a23_a18+	35,4	1,7	78800	2,3
C67 a23_a18-64	26,4	1,7	49000	2,4
C68 a23_a0-64	28,2	1,9	74200	4

C69 a23_-male	33,4	2	50100	2,2
C70 a23_0-17 male	32,6	3,8	12900	2,1
C71 a23_18-24 male	26	4,6	4000	1,8
C72 a23_25-49 male	26	2,7	13200	1,4
C73 a23_50-64 male	23,8	3,5	6400	1,5
C74 a23_65+ male	77,1	4,1	13600	1,1
C75 a23_a18+ male	33,6	2	37200	1,6
C76 a23_a18-64 male	25,4	2	23600	1,7
C77 a23_a0-64 male	27,5	2,1	36500	2,4
C78 a23_-female	35,8	2,1	53900	2,3
C79 a23_0-17 female	32,2	3,9	12400	2,1
C80 a23_18-24 female	31,7	5	4600	1,6
C81 a23_25-49 female	28,5	2,8	14500	1,5
C82 a23_50-64 female	22,9	3,2	6200	1,3
C83 a23_65+ female	83,3	3,5	16200	1
C84 a23_a18+ female	37,1	2	41600	1,5
C85 a23_a18-64 female	27,4	2,1	25400	1,6
C86 a23_a0-64 female	28,8	2,3	37700	2,6
E Act1_total	8,2	1	17600	2,3
E Act2_Working	6,4	1	9800	2,1
E Act3_not working	12,3	2,1	7800	1,9
E Act4_unemployed	21,8	6,5	2200	1,8
E Act5_retired	4,6	2,4	900	1,5
E Act6_other	14,1	2,9	4700	1,9
E01 Act1_total male	8,1	1,3	8600	1,8
E02 Act2_working male	6,4	1,3	5000	1,8
E03 Act3_not working male	12,6	3	3600	1,7
E04 Act4_unemployed male	21,6	8,3	1200	1,8
E05 Act5_retired male	1,4	1,4	100	0,9
E06 Act6_other male	16,8	4,8	2200	1,8
E07 Act1_total female	8,3	1,3	9000	1,8
E08 Act2_working female	6,5	1,4	4700	1,8
E09 Act3_not working female	12	2,6	4300	1,5
E10 Act4_unemployed female	21,9	9,9	1000	1,7
E11 Act5_retired female	7,4	4	800	1,4
E12 Act6_other female	12,3	3,3	2500	1,5
HH, no children, 0%	17,7	7,5	1400	1,6
HH, no children, 1-99%	12,3	3,5	3600	2,6
HH, no children, 100%	6	2	2800	2
HH, with children, 0%	35,4	14,3	2500	3,6
HH, with children, 1-49%	27,3	11,5	2300	4,6
HH, with children, 50-99%	11,6	3,2	6900	5,7
HH, with children, 100%	4,7	1,6	5100	5,6
J Total	4,2	0,9	5500	2
J Full time job	4	0,9	4400	1,8
J Part time job	5,8	2,5	1100	1,8
J01 Total male	4,6	1,2	3200	1,8
J02 Full time, male	4,2	1,2	2700	1,7
J03 Part time, male	9,9	6,9	500	2,1

J04 Total female	3,8	1,1	2300	1,6
J05 Full time, female	3,6	1,2	1700	1,6
J06 Part time, female	4,5	2,4	700	1,6
M01 Total	6,4	1	9700	2,2
M02 ISCED 0-2	6,4	1,9	2600	1,9
M03 ISCED 3-4	8,2	1,7	5300	2
M04 ISCED 6-5	4	1,3	1800	1,8
M05 Total male	6,4	1,3	5000	1,8
M06 ISCED 0-2, male	6,5	2,6	1300	1,8
M07 ISCED 3-4, male	7,6	2,1	2900	1,9
M08 ISCED 5-6, male	4,1	1,9	800	1,5
M09 Total female	6,4	1,4	4700	1,8
M10 ISCED 0-2, female	6,3	2,7	1300	2
M11 ISCED 3-4, female	9	2,6	2400	1,7
M12 ISCED 3-4, female	3,9	1,7	1000	1,7
O Owner and tenant	9,2	1,2	27700	3,9
O_Owner	6	1,1	14600	4
O_Tenant	22	3,8	13100	3
P01 HH no children	9,1	1,5	10600	2
P02 One <65	25,2	4,9	6400	1,1
P03 One 65+	7,7	4,1	1000	1
P04 One female	16	4,9	2900	1,1
P05 One male	22,5	5,3	4500	1
P06 Two <65, no children	5,8	2,2	2100	2,1
P07 Two adults, no children	2,7	1,8	700	2
P08 Other, no children	2,7	2,1	500	3,5
P09 HH with children	9,3	1,7	17000	5,3
P10 One adult with children	28,4	7,5	6900	3,4
P11 Two adults, one child	6,8	2,9	2400	3,8
P12 Two adults, two children	6,9	2,5	3700	4,6
P13 Two adults, 3+ children2	8	3,3	3600	6
P14 Three+ adults with children	1,8	1,6	400	4,7
Q Mat.Dep	6,7	1	20000	3,8
Q Mat.Dep 0-17	7,6	1,9	6000	3,2
Q Mat.Dep 18-64	7,3	1	13600	2,5
Q Mat.Dep 65+	1,3	0,9	500	1,6
Q01 Mat.Dep male	6	1	9000	2,3
Q02 Mat.Dep 0-17 male	6,6	1,9	2600	1,9
Q03 Mat.Dep 18-64 male	6,6	1,3	6100	2
Q04 Mat.Dep 65+ male	1,6	1,4	300	146,1
Q05 Mat.Dep female	7,3	1,3	11000	3
Q06 Mat.Dep 0-17 female	8,7	2,7	3300	2,8
Q07 Mat.Dep 18-64 female	8	1,4	7400	1,9
Q08 Mat.Dep 65+ female	1	1,1	200	130
R Aggregate replacement ratio	0,52	0,04	0	1,6
R Aggregate replacement ratio male	0,48	0,06	0	1,3
R Aggregate replacement ratio female	0,59	0,08	0	1,5
R Relative median income ratio	0,82	0,05	0	1,8
R Relative median income ratio male	0,87	0,09	0	1,2

R Relative median income ratio female	0,78	0,07	0	1,2
t01 Relative medan AROP gap	20,5	0	0	3,5
t02 Relative medan AROP gap 0-17	17,2	0,1	0	2,9
t03 Relative medan AROP gap 18+	23,7	0	0	1,7
t04 Relative medan AROP gap 18-64	22,9	0	0	1,7
t05 Relative medan AROP gap 65+	31,5	0,1	0	1,5
t06 Relative medan AROP gap male	22,1	0,1	0	2,3
t07 Relative medan AROP gap 18+ male	23,7	0,1	0	1,5
t08 Relative medan AROP gap 18-64 male	23,7	0,1	0	1,5
t09 Relative medan AROP gap04 65+ male	33,7	0,3	0	1,2
t10 Relative medan AROP gap female	20,1	0	0	2
t11 Relative medan AROP gap 18+ female	22,9	0	0	1,3
t12 Relative medan AROP gap 18-64 female	22,8	0	0	1,4
t13 Relative medan AROP gap 65+ female	31,5	0,1	0	1,1
x01 Med	3,4	0,1	67500	2,5
x02 Med 0-17	3,3	0,1	19600	2,1
x03 Med 18-64	3,4	0,1	46400	1,7
x04 Med 65+	3,2	0,3	1500	1,5
x05 Med male	3,4	0,1	30900	1,8
x06 Med 0-17 male	3,3	0,2	8800	1,7
x07 Med 18-64 male	3,5	0,1	21200	1
x08 Med 65+ male	3,3	0,5	900	1
x09 Med female	3,3	0,1	36600	1,9
x10 Med 0-17 female	3,2	0,1	10800	1,4
x11 Med 18-64 female	3,4	0,1	25100	1,1
x12 Med 65+ female	3	0	600	1

1: a022 is based on the income variable HY022 and refers to at-risk-of-poverty rate before social transfers except old-age and survivors benefits

2: a023 is based on the income variable HY023 and refers to at-risk-of-poverty rare before all social transfers

3: WI stands for work intenstity of the household. 1 meaning that all household members of working age are working while 0 means that none of the household members of working ageis working. The variable WI is analysed based on whether there are dependents or children in the household or not.

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 2011 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 4,313 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 originally selected by simple random sampling from the national register in the end of the year 2008. 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
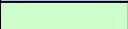
Those drawn new in sample year t+1
Those drawn new in sample year t+2
Those drawn new in sample year t+3

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 were 16 years old in 2008 are 20 years old in 2011 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:

$$DB080 = \frac{1}{n16+}$$

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.

PB060 is the personal cross-sectional weight for selected respondent:

$$PB060 = \frac{N(kba)}{n(kba)}$$

Where
N = Population 16 years and older 31. December 2010 in private homes
n = number of cases in the data base
k = sex   b = residence (capital area and other areas)
a = age groups [16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-66, 67-79, 80+]

Originally the household cross-sectional weight (**DB090**) was calculated a shown below:

$$DB090 = DB080 * PB060 = \frac{1}{n16+} * \frac{N(kba)}{n(kba)}$$

Where
N = Population 16 years and older 31. December 2010 in private homes
n = number of cases in the data base
k = sex   b = residence (capital area and other areas)
a = age groups [16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-66, 67-79, 80+]

Integrative calibration is applied using the software R. The original values of **DB090** are replaced by calibrated values. The calibrated values of **DB090** are also assigned to **RB050** in order to assign identical weight to all members of the same household. Integrative calibration takes into account the distribution of the population according to age, sex and residence as described above.

The personal cross-sectional weight **PB040** is equal to **RB050**.

The personal design weight for selected respondent **PB070** is calculated in a similar way as **PB060** except **PB070** applies to the selected sample while **PB060** applies to respondents only.

$$PB070 = \frac{N(kba)}{s(kba)}$$

Where
N = Population 16 years and older 31. December 2010 in private households
s = number of selected respondents
k = sex   b = residence (capital area and other areas)
a = age groups [16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-66, 67-79, 80+]

The children cross-sectional weight **RL070** is calculated with the number of children in each one-year group (0-12 years) in private households in the population divided by the number of children in one-year groups in the households interviewed:

$$RL070 = \frac{BA}{ba}$$

Where
BA = population 0-12 years of age 31. December 2010 in private households
b = number of children 0-12 years old in the respondents' households
a = age groups [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]

2.1.8.4 Final Cross sectional weight:

The final cross sectional weight is described in section 2.1.8.1 to 2.1.8.3 above

2.1.9 Substitutions

No substitutions were applied.

2.2 Sampling errors

2.2.1. Standard errors and effective sample size

Standard errors for the cross sectional indicators were calculated in the software R, using households as clusters. The standard errors are shown in table 1.

There were 4.313 persons in the 2011 sample. During the field period, 250 of these proved to be non-eligible (either deceased, living in institutions or emigrated), thus giving a net sample of 4018 persons. Interviews were completed for 3.021 of them.

Table 2.2.1.A The mean, the total number of observations and the standard errors for the following income components

	Mean	SE	Count	Valid N
HY010	7614659	108804	3018	3018
HY020	5423324	72562	3018	3018
HY022	4761168	74953	3018	3018
HY023	3985507	78628	3018	3018
HY030G	802498	13126	3018	3018
HY040G	55858	5560	3018	3018
HY090G	384457	40990	3018	3018
HY050G	143161	6672	3018	3018
HY060G	12076	1985	3018	3018
HY070G	116449	4285	3018	3018
HY080G	79858	4645	3018	2893
HY081G	66731	4235	3018	2924
HY100G	472087	11873	3018	3018
HY110G	13697	1177	3018	3018
HY120G	79979	4126	3018	3018
HY130G	92421	8009	3018	2899
HY131G	65672	7652	3018	2937
HY140G	2018935	38838	3018	3018
PY010	2860553	41781	6891	6891
PY020	94854	4599	6891	6761
PY021	38265	2464	6891	6809
PY030	362708	5287	6891	6891
PY035	86	42	6891	6891
PY050	88715	5876	6891	6891
PY090	77293	4368	6891	6891
PY100	360113	17566	6891	6891
PY110	50541	5359	6891	6891
PY120	1864	776	6891	6891
PY130	121994	8147	6891	6891
PY140	5573	1212	6891	6891

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

	Income	SE	Count
1 hh member	2691411	68715,68	480
2 hh members	3592240	83521,93	1788
3 hh members	3529513	77107,44	1713
4+ hh members	3330945	52666,29	4870
<25 years	3411290	42346,08	4475
35-44 years	3290398	34876,04	4376
45-45 years	3123327	41094,05	3468
55-64 years	3091086	55544,61	990
65+	3362313	79678,93	1135
Male	3647516	58072,84	1396
Female	3664074	82335,31	1862

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 2010. 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.

Various changes have been made on the survey questionnaire through the years SILC has been done in Iceland. Some of them are in order to fix errors or improve the measurement.

HS010: For instance some people reached agreement with their bank to stop paying off their loan temporarily and others just decided on their own to stop paying. We ask if this is the case and categorize those cases as being in arrears on mortgage in variable HS010.

HH061: We put in a new question with closed categories read out to the respondent in HH061 in order to try to increase response rate for this variable which has been a problem. Before there was an open follow-up question asking respondent's to try to give their best estimate if they did not know.

2.3.2.2. Interviewer and processing errors

The data collection mode in the Iceland EU-SILC is CATI, using the software Blaise. Data entry controls are built into the electronic questionnaire.

Once the data has been collected all processing is done in the SQL data management software, except for imputations which are done in SPSS.
Registers are used quite extensively in the EU SILC in Iceland. The result should be a decrease in measurement error from respondents or interviewers. However there still room for human error in data process as complexities are added to the data processing with linking between survey data and public records or other outside data. The following sources of data are used: the national register, tax register, real estate register, HBS (Household budged survey) data, municipality tax data and list of people living in institutions.

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

Achieved sample size

	Households (HH)	Persons 16+	HH members
2007	809	1025	1834
2008	763	976	1739
2009	759	948	1707
2010	690	793	1483
	3021	3742	6763

2.3.3.2. Unit nonresponse

Household nonresponse rates (NRh)

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

Where

$$Ra = \frac{Number\_of\_addresses\_successfully\_contacted}{Number\_of\_valid\_addresses\_selected}$$

$$Ra = \frac{\sum(DB120 = 11)}{\sum(DB120 = all) - \sum(DB120 = 23)} = \frac{4018}{4313 - 295} = 1$$

$$Rh = \frac{Number\_of\_household\_interviews\_completed\_and\_accepted\_for\_database}{Number\_of\_valid\_addresses\_selected}$$

$$Rh = \frac{\sum(DB130 = 11)}{\sum(DB130 = all)} = \frac{3021}{4018} = 0.7519$$

$$NRh = (1 - 0.7519) * 100 = 24.81$$

Individual nonresponse rates (NRp)

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

Where

$$Rp = \frac{Number\_of\_personal\_interviews\_completed}{Number\_of\_eligible\_individuals\_in\_households\_where\_interviews\_were\_completed\_and\_accepted\_for\_database}$$

$$Rp = \frac{6894}{6894} = 1$$

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

Overall individual nonresponse rates (*NRp)

$$* NRp = (1 - (Ra * Rh * Rp)) * 100 = (1 - (1 * 0.2481 * 1)) * 100 = 75.19$$

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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
11.Contacted	1020	1025	1006	964	4015
23.Does_not_exist	88	56	39	112	295
Total	1108	1081	1045	1076	4310

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

	Rot.1	Rot.2	Rot.3	Rot.4	Total
11 Completed	755	767	786	710	3018
21 Refusal	128	110	74	127	439
22 Away	128	141	136	112	517
23 Unable to resp.	8	7	10	13	38
24. Other	1	0	0	2	3
Total	1020	1025	1006	964	4015

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

	Rot.1	Rot.2	Rot.3	Rot.4	Total
1 Accepted	755	767	786	710	3018
2 Rejected	0	0	0	0	0
Total	755	767	786	710	3018

Respondents for whom we could not retrieve social ID numbers were excluded from the data as well as the households they belong to. They are the "other reasons" in table 2.3.3. B. 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.

2.3.3.4. Distribution of substituted units

Not applicable as no substitutions are applied.

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" (HY080G and HY130G). Imputations were used for those variables based on survey data.

For further information on item nonresponse we refer to the 2008 report.

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

	%received	%missing	%partial
HY010	100	0	0
HY020	99,8	0	0
HY022	97,6	0	0
HY023	89,1	0	0
HY030G	81,4	0	0
HY040G	7,6	0	0
HY090G	99,3	0	0
HY050G	39,2	0	0
HY060G	3,2	0	0
HY070G	42,8	0	0
HY080G	16,3	25,5	0
HY081G	13,6	22,9	0
HY100G	64,7	0	0
HY110G	33,9	0	0
HY120G	79	0	0
HY130G	15,8	25	0
HY131G	8,4	32	0
HY140G	98,1	0	0
PY010	82,7	0	0
PY020	32,1	5,9	0
PY021	6,7	17,8	0
PY030	82,5	0	0
PY035	0,1	0	0
PY050	8,8	0	0
PY090	9,1	0	0
PY100	12	0	0
PY110	8,6	0	0
PY120	0,2	0	0
PY130	5,1	0	0
PY140	2,6	0	0

Table 2.3.3.6 Total item nonresponse and number of observations

	Male	Female	Total
Males	3479	3412	6891
Females	2517	2321	4838
Employed	229	220	449
Unemployed	529	677	1206
Inactive	798	710	1508
< 25	516	474	990
25-34	537	598	1135
45-54	690	706	1396
55-64	513	500	1013
65+	425	424	849
Owner	2988	2912	5900
Tenant	488	499	987
One person < 65	185	129	314
One person, 65+	56	109	165
One male	241	0	241
One female	0	238	238
One, total	241	238	479
Two adults < 65, no child	463	467	930
Two adults, no children	327	317	644
Other, no children	421	319	740
Single parent	80	206	286
Two adults, one child	447	425	872
Two adults, two children	544	541	1085
Two adults, three children	406	406	812
Other hh with children	530	479	1009
Other HH, no children	1452	1341	2793
HH with children	2007	2057	4064

2.3.3.6 Total item nonresponse for equivalized disposable income

The information for the income variables were mainly collected through registers. Only information for HY080 and HY130 was received from the tax register. Nonresponse for each income variable is shown in table 2.3.3.5.

If the social ID number was not received for a household member in the interview the household was not included in the data. Therefore we were able to link all household members of all the households to the tax register. Item nonresponse for the equivalized disposable income is therefore only partial where the information were missing for HY080 and HY130 as shown in table 2.3.3.5.

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)

	Sel.resp., registers only	Sel.resp., interview & reg.	Not selected, iw.& reg.	Total
Rot. 1	12	786	1027	1825
Rot. 2	10	767	949	1726
Rot. 3	4	755	974	1733
Rot. 4	14	710	886	1610

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

	Type of interview	Sel.resp.	Not selected	Total
Rot. 1	CATI	786	1548	2334
Rot. 2	CATI	767	1418	2185
Rot. 3	CATI	755	1484	2239
Rot. 4	CATI	710	1387	2097

2.5. Interview duration

The mean duration of the personal interview (PB120) was 18 minutes and 26 seconds and the mean duration of the household interview (HB100) was 11 minutes and 22 seconds.
The mean duration of the total interview was 29 minutes and 47 seconds per average.

	Minutes	Seconds
Personal_interview	18	26
Household_interview	11	22
Total_interview	29	47

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 2009, living in private households.

The private household definition

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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 2010.

The period for taxes on income and social insurance contributions
The period for taxes on income and social insurance contributions is the calendar year 2010.

The reference period for taxes on wealth
The reference period for taxes on wealth is the calendar year 2010.

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 1st of March and 4th of Mai 2011.

Basic information on activity status during the income reference period

Table 3.1 Activity status of persons 18 years or older

	N	%
Working	4561	70
Unemployed	280	4
Retired	449	7
Other inactive	985	15
Not responded	221	3
Total	6496	99

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.

The components of income are listed out in the 2008 report.

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 and HY130 (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.

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