



Intermediate Quality Report

EU-SILC 2011

National Statistics Office
Malta

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1 Common cross-sectional European Union indicators

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

An overview of the main cross-sectional indicators derived from EU-SILC 2011 in Malta is presented here, in accordance with the Commission Regulation No. 28/2004.

Primary Laeken indicators of social cohesion EU-SILC 2011

At-risk-of-poverty rate after social transfers by age and gender

%		Age			
		Total (0+)	0-17	18-64	65+
Sex	Total	15.4	21.1	13.1	18.1
	Male	15.0	-	12.0	20.1
	Female	15.8	-	14.3	16.5

At-risk-of-poverty rate after social transfers by frequent activity status and gender

%		Most frequent activity status				
		Employed	Not employed			
Sex		Total employed	Total not employed	Unemployed	Retired	Other inactive
	Total	6	21.2	42.8	17.6	20.5
	Male	7.7	22.6	42.5	19.9	18.3
	Female	3	20.4	43.5	10.3	20.9

At-risk-of-poverty rates after social transfers by household type

Household Type			%
Total households			15.4
All households with no dependent children	Total		12.2
	1 person households	Male	25.7
		Female	20.7
		age < 65 yrs	28.2
		age 65+	18
	2 adults no dependent children	both age < 65 yrs	13.1
		at least one age 65+	21.2
	Other households with no dependent children	A_GE3	4.8
All households with dependent children	Total		18
	Single parent	at least 1 dependent child	47.2
	2 adults	1 dependent child	12.4
		2 dependent children	19.4
		3+ dependent children	32.2
	Other households with dependent children	A_GE3_DCH	11.5

At-risk-of poverty rates after social transfers by accommodation tenure status

Tenure status	%
Owner or rent-free	13.8
Tenant	24.8

At-risk-of-poverty threshold (illustrative values)

Household type	Currency	At-risk-of-poverty threshold (illustrative values)
1 person household	NAC	6517
2 adults 2 dependent children younger than 14 years	NAC	13686

Inequality of income distribution S80/S20 income quintile share ratio

S80/S20 income quintile ratio	4.1
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Relative median at-risk-of-poverty gap

%		Age			
		Total (0+)	0-17	18-64	65+
Sex	Total	17.7	16.3	18.3	19.3
	Male	17.2	-	17.7	19.4
	Female	18	-	18.5	19

At-risk-of-poverty rate before transfers

At-risk-of-poverty rate where income is the 'equivalised disposable income before social transfers except old-age and survivors' benefits'

%		Age			
		Total (0+)	0-17	18-64	65+
Sex	Total	22.9	30.3	20.4	24.4
	Male	22	-	19.1	24.4
	Female	23.8	-	21.7	24.4

At-risk-of-poverty rate where income is the 'equivalised disposable income before social transfers including old-age and survivors' benefits'

%		Age			
		Total (0+)	0-17	18-64	65+
Sex	Total	36.9	33.3	27.9	82.1
	Male	34.4	-	25.7	80
	Female	39.4	-	30.1	83.8

Inequality of income distribution: Gini coefficient

Gini coefficient	27.4
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1.2 Other indicators

1.2.1 Equivalised disposable income

From SILC 2011, the mean equivalised disposable income was estimated to be €12,139.

1.2.2 The unadjusted gender pay gap

The gender pay gap is not calculated from EU-SILC for Malta.

2 Accuracy

2.1 Sample design

2.1.1 Type of sampling design

The integrated, or rotational, design has been adopted for Malta's EU-SILC. This design with 4 sub-samples complies with Eurostat recommendations with respect to both cross-sectional and longitudinal operations. The system of rotational panels implies that each year the oldest panel is dropped and replaced by a new panel of households. In this way, each group of households is included in the sample for four waves of the survey and information is collected over a period of four consecutive years.

A single-stage sampling design is used for EU-SILC in Malta. Every year, the new panel (amounting to 1,713 households in SILC 2011) is selected randomly from a register of persons and households which is based on the Census of Population and Housing that was held in 2005. This database is maintained and updated on a regular basis by NSO. The remaining total sample of households for EU-SILC 2011 numbered 3,138 households, of which 1,215 were interviewed for the first time in 2010, 1,100 households in 2009 and 823 households in 2008.

2.1.2 Sampling units

The sampling population for EU-SILC in Malta is composed of all private households consisting of persons who share their income and expenses. The simple random sample of households is selected from a register of persons and households, based on the Census of Population and Housing 2005, which is regularly maintained. Sample selection is followed by a data collection period during which the selected households are contacted and personal interviews are carried out with persons living within these households.

2.1.3 Stratification and sub stratification criteria

This section is not applicable, as stratified sampling is not used for EU-SILC Malta.

2.1.4 Sample size and allocation criteria

As stipulated in the Council Regulation, each Member State is required to achieve a minimum effective sample size of households and eligible persons (persons aged 16+) for the cross-sectional component of EU-SILC. For Malta, the minimum effective sample size amounts to 3,000 households, which corresponds to a minimum of 7,000 persons aged 16 and over.

In 2011, the gross sample size for the Maltese EU-SILC was 4,851 households, yielding a sample of 4,620 eligible households. The 231 ineligible households were either cases in which addresses did not exist, or were found to be non-residential addresses, permanently vacant or institutional households (e.g. elderly homes).

2.1.5 Sample selection schemes

A one-stage sampling design is implemented in Malta. Simple random sampling is used each year to select the new panel of dwellings to be added to the sample to be interviewed. Thus in SILC 2011 the complete sample was made up of the 3 panels chosen in each of the three years from 2008 to 2010 together with the new panel chosen to be interviewed for the first time in 2011. For households in the three old panels, SILC 2011 was the second, third or fourth (and last) time they were being contacted to complete the survey.

2.1.6 Sample distribution over time

Data collection was carried out between July and October 2011. The interviews were roughly evenly spread across these four months.

2.1.7 Renewal of sample: rotational groups

As has been described previously, the four-year rotational design, as recommended by Eurostat, is applied in Malta. Each of the panels is kept in the sample for four consecutive years before being replaced by a new panel of households. Therefore, for the cross-sectional EU-SILC 2011, the three panels introduced in 2008, 2009 and 2010 were kept in the sample while the panel chosen in 2007 was dropped and replaced by a new panel with 1,713 households.

2.1.8 Weightings

The computation of weights is based on the distribution of the household population. This distribution is estimated by first deriving total population counts, through a series of annual population updates based on the 2005 Census data. This is followed by an estimation of the population living in institutional households, and as a result the required household population counts can be derived.

2.1.8.1 Design factor

By definition, household design weights are calculated as the inverse of the selection probability of households.

The household design weight for households interviewed for the first time in EU-SILC 2011, was calculated by dividing the total number of eligible households in Malta in 2011 by the number of new households in the EU-SILC 2011 sample. Eligible households do not include households with non-residential address, permanently vacant dwellings and institutional households.

The design weight for households interviewed for the second, third or fourth time was equivalent to the cross-sectional weight computed in SILC 2010. Split households were given the same weight as the corresponding 'parent' household.

2.1.8.2 Non-response adjustments

Correction for non-response was carried out separately for each panel. For new households, the adjustment for non-response at individual level was incorporated in the calculation of design weights. For old households, i.e. for the remaining three panels, the adjustment for attrition was carried out through post-stratification. The values of the variables for SILC 2011 used in the post-stratification were as at 2010 (since these may not be necessarily the same as in the current situation). Specifically, the variables used were age-group (0-17, 18-24, 25-49, 50-64, 65+), sex and district (NUTS 4), also as at 2010. Non-sample persons in SILC 2011 were excluded from non-response adjustments.

2.1.8.3 Adjustments to external data (level, variables used and sources)

A temporary cross-sectional weight was created as the product of the design weight and non-response adjustment. This temporary weight was normalised and trimmed so as to lie within the lowest and highest deciles, thus reducing the range of the weights. The

resulting weight was used as the initial weight for calibration. SAS-based CALMAR software was used for the calibration. The logit method (lower limit = 0.7, upper limit = 1.3) was applied and the calibrating variables used were:

- Household size (1,2,3,4,5+)
- District (NUTS 4 level)
- Household type
 - Household without dependent children
 - Single parent household
 - Households with 2 adults, 1 - 2 children
 - Other households with dependent child
- Number of persons in households by
 - Sex
 - 5 year age-groups

The range of values for the resulting weights had to be narrowed further, so trimming was carried out again on the lowest and highest 2% of the weights. CALMAR was run once more with the logit method and this time convergence was obtained within narrower limits (lower limit = 0.9, upper limit = 1.1).

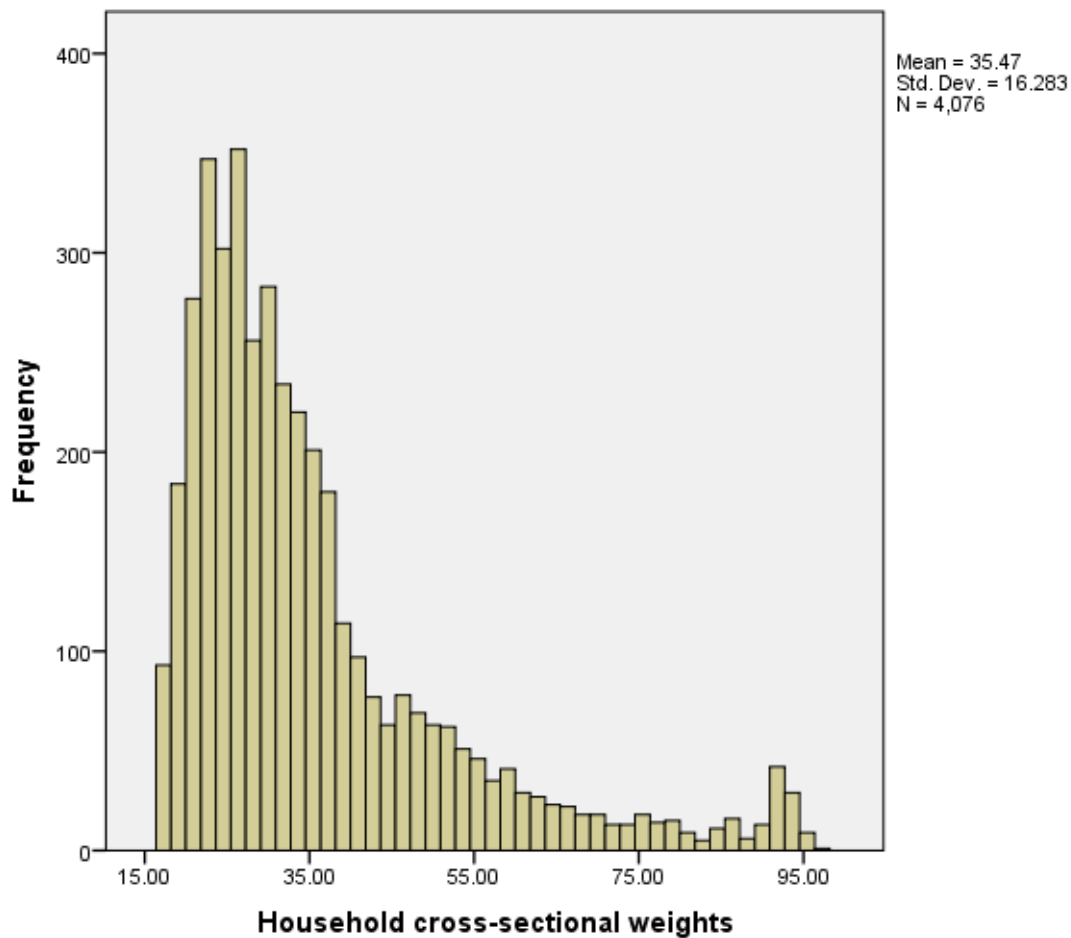
The new set of weights fell in the required interval [$0.3 \times \text{mean weight}$, $3 \times \text{mean weight}$], and thus no further trimming and re-calibration were required.

2.1.8.4 Final cross-sectional weight

The following represents summary statistics for the final household cross-sectional weights.

Minimum	Maximum	Mean	Median	Standard deviation	Coefficient of variation
17.62	96.77	35.47	30.61	16.28	0.46

The following histogram illustrates the distribution of the final household cross-sectional weights:



2.1.9 Substitutions

No substitutions were made.

2.2 Sampling errors

2.2.1 Standard error and effective sample size

The standard errors in the following tables have been computed using linearization techniques, specifically through the use of SAS macros for linearizing EU-SILC complex income indicators.

At-risk-of poverty rates after social transfers by age and gender

Age	Sex	Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Total (0+)	Total	15.4	0.6	1.4	11207
	Male	15.0	0.7	1.4	5457
	Female	15.8	0.7	1.5	5750
0-17	Total	21.1	1.2	2.6	2067
	Male	21.6	1.5	3.3	1075
	Female	20.6	1.5	3.3	992
18-24	Total	13.1	1.2	2.5	1101
	Male	11.8	1.5	3.2	550
	Female	14.5	1.6	3.5	551
25-49	Total	13.4	0.7	1.4	3389
	Male	11.8	0.7	1.5	1691
	Female	15.0	0.8	1.7	1698
50-64	Total	12.8	0.9	1.8	2649
	Male	12.5	0.9	2.0	1273
	Female	13.0	1.0	2.1	1376
65+	Total	18.1	1.3	2.9	2001
	Male	20.1	1.6	3.4	868
	Female	16.5	1.4	3.0	1133
18+	Male	13.3	0.6	1.3	4382
	Female	14.7	0.6	1.4	4758
18-64	Male	12.0	0.6	1.3	3514
	Female	14.3	0.6	1.4	3625
0-64	Male	14.2	0.7	1.5	4589
	Female	15.7	0.7	1.6	4617

At-risk-of poverty rates after social transfers by most frequent activity status and gender

Most frequent activity status	Sex	Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Employed	Total	6.0	0.4	0.8	3952
	Male	7.7	0.5	1.1	2550
	Female	3.0	0.5	1.0	1402
Unemployed	Total	42.8	3.1	6.7	284
	Male	42.5	3.6	7.8	190
	Female	43.5	5.3	11.5	94
Retired	Total	17.6	1.2	2.6	1620
	Male	19.9	1.3	2.9	1218
	Female	10.3	1.7	3.7	402
Other inactive	Total	20.5	1.0	2.1	3253
	Male	18.3	2.0	4.3	405
	Female	20.9	1.0	2.1	2848

At-risk-of poverty rates after social transfers by tenure status

Tenure status	Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Owner or rent-free	13.8	0.20671	0.45	9515
Tenant	24.8	0.67487	1.46	1692

At-risk-of poverty rates after social transfers by household type

Household Type			Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Total			15.4	0.6	1.4	11207
All households with no dependent children	Total		12.2	0.7	1.5	5504
	1 person households	Total	22.7	1.7	3.7	744
		M	25.7	2.5	5.4	264
		F	20.7	2.1	4.5	480
		age < 65 yrs	28.2	2.5	5.3	315
		age 65+	18.0	2.1	4.5	429
	2 adults no dependent children	both age < 65 yrs at least one age 65+	13.1 21.2	1.6 1.9	3.4 4.2	972 1382
	Other households with no dependent children		4.8	0.8	1.7	2406
All households with dependent children	Total		18.0	1.0	2.1	5703
	Single parent	at least 1 dep. child	47.2	5.0	10.7	282
	2 adults	1 dep. child	12.4	1.5	3.3	1179
		2 dep. children	19.4	1.8	3.9	1872
		3+ dep. children	32.2	3.8	8.1	702
	Other households with dependent children		11.5	1.6	3.4	1668

At-risk-of poverty rates after social transfers by household type and work intensity

Household type	Work intensity	Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
All households with no dependent children	WI = 0	34.9	2.6	5.6	934
	0 < WI < 1	4.9	0.8	1.7	2163
	WI = 1	1.9	0.5	1.0	1050
All households with dependent children	WI = 0	79.0	3.7	8.0	427
	0 < WI < 0.5	23.9	3.5	7.5	576
	0.5 <= WI < 1	18.0	1.4	3.1	2927
	WI = 1	3.3	0.9	1.9	1765

Median equivalised disposable income

Median value (€)	Standard error	Sample size (persons)
10,862	158.3	11,207

2.3 Non-sampling errors

2.3.1 Sampling frame and coverage errors

The database based on the 2005 Census of Population & Housing, that is held and maintained by NSO through annual updates, provides a comprehensive count of all persons living in Malta and Gozo. As a result, this database is considered to be the most adequate source to be used for the Maltese EU-SILC sample selection and served as sampling frame for EU-SILC 2011.

Nonetheless, 231 households from the sample resulted to be ineligible addresses, corresponding to just under 5 per cent of the total selected sample.

2.3.2 Measurement and processing errors

2.3.2.1 Measurement errors

Measurement errors can occur in different phases and for different reasons. They can be defined as the bias between the recorded value provided by the respondent (which might not be the actual value) and the true but unknown value of the given variable. The main sources of such errors are typically the questionnaire and the data collection process in general.

Questionnaire

Every year, in preparation for a new SILC wave, revisions are made to the questionnaire. The revisions are made to include the new module and correct for any possible misunderstandings in the way the questions are worded and departures from standard Eurostat definitions. This is done by taking on board any feedback obtained from interviewers and respondents during the previous year's data collection round and also from Eurostat communications.

In particular for SILC 2011 it was decided to go a step further and revise the structure of the questionnaire in an attempt to reduce response burden and interview duration, without compromising on quality. This was done through the introduction of a series of filter questions aimed at respondents who were participating in SILC for the second,

third or fourth time. Through these filter questions, respondents were asked whether their situation in terms of things like marital status, citizenship, type of dwelling, number of rooms in the main dwelling etc. has changed from the previous year. When answers to the filter questions are in the negative, the routing of the questionnaire allows respondents to by-pass certain questions since responses can be retrieved from the previous year's dataset. If on the other hand respondents report that there has been a change, the relevant questions are asked as usual. In this way any redundant questions are filtered out, and the data collection process becomes more efficient.

SILC data collection is conducted using a Computer-Assisted Personal Interviewing (CAPI) method. Thus the questionnaire has been translated into CAPI format and incorporates automatic routing of questions and a series of validations that alert interviewers to inconsistencies during data collection. This method has many advantages as it results in a shorter interview duration and a reduction in the amount of human errors. It also enables certain basic demographics (like age and gender) to be uploaded in advance, thus lessening the response burden as much as possible.

Interviewers

The approach, integrity, knowledgeability of SILC definitions and professionalism of interviewers are fundamental in determining the success of the SILC project. Therefore considerable effort is directed towards the recruitment, training and monitoring of interviewers. This entire process is co-ordinated by NSO.

Training is carried out through a series of briefing sessions. Interviewers working on SILC for the first time must attend two sessions. The first session consists of an intensive question-by-question explanation of the questionnaire and corresponding definitions. The second session is held to provide assistance related to the CAPI aspect of the data collection. Interviewers are provided with fictitious 'test' households created in each laptop in order to encourage interviewers to experiment the process of inputting data before interviewing the actual households. For old interviewers, a presentation is held outlining changes made to the questionnaire and data entry program, as well as interviewers' errors identified from the previous year. Furthermore, all interviewers are encouraged to contact our office whenever encountering difficulties.

Monitoring of the interviewing process is carried out through regular audits on a sub-sample of households throughout the data collection period. In rare instances where audits revealed negligence or inappropriate behaviour from interviewers, immediate disciplinary action was taken.

Respondents

Malta being a small country implies that the response burden is heavily felt. The fact that SILC is based on a rotational design and consequently households are asked to participate for four consecutive years also adds to the burden. In addition to this,

despite an emphasis on the fact that the Malta Statistics Act ensures full confidentiality, there still exists the fear amongst respondents that identification of individuals through their responses may be possible. The sensitive nature of the questions in SILC probably makes respondents even more wary. Despite these difficulties, a reasonably good level of cooperation and response rate are achieved in EU-SILC.

In SILC 2011, though less than in previous years, a relatively high percentage of proxy interviews was still recorded despite all efforts to minimise the incidence of proxy interviews. In view of the difficulties mentioned above, in some cases interviewers are allowed to use proxy and telephone interviews to reduce non-response. In such cases interviewers are to request household members who could not be present during the interview to leave documentation such as pay slips and tax returns with the person who will be responding on their behalf, so that as much as possible the proxy effect does not result in a loss in quality.

In order to reduce attrition and in an attempt to make participation in SILC a bit more attractive, each year the office organizes a lottery for all households having participated for the second, third and fourth time. The winning prize is a holiday for two including flights and accommodation.

2.3.2.2 Processing errors

As mentioned above, a face-to-face CAPI method of data collection is used for Malta's EU-SILC. The program has been designed through the use of Blaise software. Through this program, the user is routed automatically from one question to the next. This automatic routing eliminates the risk of omitting certain questions unintentionally, and allows the interviewer to concentrate more on other aspects of the survey.

The program also consists of in-built validations that will help to reduce processing errors related to data entry as well as human errors. These validations involve logic and consistency checks with previous related responses and between questions themselves. Checks are also carried out for any data entry of extreme values. Pop-up dialog boxes are displayed with error messages whenever an error is encountered. In some cases error suppression is allowed, thus catering for exceptional responses.

Thus, the CAPI method leaves little room for error and at the same time speeds up the whole process of data collection. Nevertheless, an element of human error still remains and consequently the possibility of data entry errors cannot be excluded entirely.

As a further security measure, all interviewers are equipped with a pen drive and are instructed to take regular backups of encrypted data collected from the respondents. This was done in order to prevent any loss of data that may result in the event of the laptop sustaining damage.

2.3.3 Non-response errors

2.3.3.1 Achieved sample size

Total households

	Total
Number of accepted household interviews	4,076
Number of persons 16 years and older	9,454

Rotational Group 1

	Total
Number of accepted household interviews	1,071
Number of persons 16 years and older	2,503

Rotational Group 2

	Total
Number of accepted household interviews	984
Number of persons 16 years and older	2,257

Rotational Group 3

	Total
Number of accepted household interviews	1,252
Number of persons 16 years and older	2,951

Rotational Group 4

	Total
Number of accepted household interviews	769
Number of persons 16 years and older	1,743

2.3.3.2 Unit non-response

Household non-response rates (NRh)

The address contact rate (R_a) is given by:

$$R_a = \frac{\sum[DB120 = 11]}{\sum[DB120 = all] - \sum[DB120 = 23]} = \frac{4562}{4851 - 231} = 0.987$$

The proportion (R_h) of complete household interviews and accepted for the database is:

$$R_h = \frac{\sum[DB135 = 1]}{\sum[DB130 = all]} = \frac{4076}{4562} = 0.893$$

The household non-response rate (NR_h) is given by:

$$NR_h = (1 - (R_a * R_h)) * 100 = (1 - (0.987 * 0.893)) * 100 = 11.8\%$$

Individual non-response rate (NR_p)

The proportion (R_p) of complete interviews within the households accepted for the database:

$$R_p = \frac{\sum[RB250 = 11 + 12 + 13]}{\sum[RB245 = 1 + 2 + 3]} = \frac{9454}{9454} = 1$$

The individual non-response rate (NR_p) is given by:

$$NR_p = (1 - (R_p)) * 100 = (1 - (1)) * 100 = 0\%$$

The reason behind a zero individual non-response rate is that whenever a household was interviewed and one (or more) of the household members did not respond, proxy answers for these individuals were requested from responding members.

Overall individual non-response rate (NR_p)

The overall individual non-response rate (NR_p) is given by:

$$NR_p = (1 - (R_a * R_h * R_p)) * 100 = (1 - (0.987 * 0.893 * 1)) * 100 = 11.8\%$$

The rates are now computed for the new replications only.

Non-response rates for new replications

Household non-response rate (NR_h)

The address contact rate (R_a) for households is given by:

$$R_a = \frac{\sum[DB120 = 11]}{\sum[DB120 = all] - \sum[DB120 = 23]} = \frac{1509}{1713 - 177} = 0.982$$

The proportion (R_h) of complete household interviews and accepted for the database is:

$$R_h = \frac{\sum[DB135 = 1]}{\sum[DB130 = all]} = \frac{1252}{1509} = 0.830$$

The household non-response rate (NR_h) is given by:

$$NR_h = (1 - (R_a * R_h)) * 100 = (1 - (0.982 * 0.830)) * 100 = 18.5\%$$

Individual non-response rate (NR_p)

The proportion (R_p) of complete interviews within the households accepted for the database:

$$R_p = \frac{\sum[RB250 = 11 + 12 + 13]}{\sum[RB245 = 1 + 2 + 3]} = \frac{2951}{2951} = 1$$

The individual non-response rate (NR_p) is given by:

$$NR_p = (1 - (R_p)) * 100 = (1 - (1)) * 100 = 0\%$$

The reason behind a zero individual non-response rate is that whenever a household was interviewed and one (or more) of the household members did not respond, proxy answers for these individuals were requested from responding members.

Overall individual non-response rate (NR_p)

The overall individual non-response rate (NR_p) is given by:

$$NR_p = (1 - (R_a * R_h * R_p)) * 100 = (1 - (0.982 * 0.830 * 1)) * 100 = 18.5\%$$

2.3.3.3 Distribution of households (original units) by ‘record of contact at address’ (DB120), by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135), for each rotational group and for the total

Distribution of original units by ‘record of contact at address’ (DB120)

Total households

	Number	Percentage
Total (DB120 = 11 to 23)	4851	100.0
Address contacted (DB120 = 11)	4562	94.0
Address non-contacted (DB120 = 21 to 23)	289	6.0
Total address non-contacted (DB120 = 21 to 23)	289	100.0
Address cannot be located (DB120 = 21)	58	20.1
Address unable to access (DB120 = 22)	0	0.0
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	231	79.9

Rotational Group 1

	Number	Percentage
Total (DB120 = 11 to 23)	1215	100.0
Address contacted (DB120 = 11)	1174	96.6
Address non-contacted (DB120 = 21 to 23)	41	3.4
Total address non-contacted (DB120 = 21 to 23)	41	100.0
Address cannot be located (DB120 = 21)	15	36.6
Address unable to access (DB120 = 22)	0	0.0
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	26	63.4

Rotational Group 2

	Number	Percentage
Total (DB120 = 11 to 23)	1100	100.0
Address contacted (DB120 = 11)	1077	97.9
Address non-contacted (DB120 = 21 to 23)	23	2.1
Total address non-contacted (DB120 = 21 to 23)	23	100.0
Address cannot be located (DB120 = 21)	10	43.5
Address unable to access (DB120 = 22)	0	0.0
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	13	56.5

Rotational Group 3

	Number	Percentage
Total (DB120 = 11 to 23)	1713	100.0
Address contacted (DB120 = 11)	1509	88.1
Address non-contacted (DB120 = 21 to 23)	204	11.9
Total address non-contacted (DB120 = 21 to 23)	204	100.0
Address cannot be located (DB120 = 21)	27	13.2
Address unable to access (DB120 = 22)	0	0.0
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	177	86.8

Rotational Group 4

	Number	Percentage
Total (DB120 = 11 to 23)	823	100.0
Address contacted (DB120 = 11)	802	97.4
Address non-contacted (DB120 = 21 to 23)	21	2.6
Total address non-contacted (DB120 = 21 to 23)	21	100.0
Address cannot be located (DB120 = 21)	6	28.6
Address unable to access (DB120 = 22)	0	0.0
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	15	71.4

Distribution of address contacted by 'household questionnaire result' (DB130) and by 'household interview acceptance' (DB135)**Total households**

	Number	Percentage
Total	4562	100.0
Household questionnaire completed (DB130 = 11)	4076	89.3
Interview not completed (DB130 = 21 to 24)	486	10.7
Total interview not completed (DB130 = 21 to 24)	486	100.0
Refusal to co-operate (DB130 = 21)	306	63.0
Entire household temporarily away for duration of fieldwork (DB130 = 22)	12	2.5
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	62	12.8
Other reasons (DB130 = 24)	106	21.8
Household questionnaire completed (DB135 = 1 + 2)	4076	100.0
Interview accepted for database (DB135 = 1)	4076	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 1

	Number	Percentage
Total	1174	100.0
Household questionnaire completed (DB130 = 11)	1071	91.2
Interview not completed (DB130 = 21 to 24)	103	8.8
Total interview not completed (DB130 = 21 to 24)	103	100.0
Refusal to co-operate (DB130 = 21)	66	64.1
Entire household temporarily away for duration of fieldwork (DB130 = 22)	6	5.8
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	11	10.7
Other reasons (DB130 = 24)	20	19.4
Household questionnaire completed (DB135 = 1 + 2)	1071	100.0
Interview accepted for database (DB135 = 1)	1071	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 2

	Number	Percentage
Total	1077	100.0
Household questionnaire completed (DB130 = 11)	984	91.4
Interview not completed (DB130 = 21 to 24)	93	8.6
Total interview not completed (DB130 = 21 to 24)	93	100.0
Refusal to co-operate (DB130 = 21)	65	69.9
Entire household temporarily away for duration of fieldwork (DB130 = 22)	3	3.2
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	10	10.8
Other reasons (DB130 = 24)	15	16.1
Household questionnaire completed (DB135 = 1 + 2)	984	100.0
Interview accepted for database (DB135 = 1)	984	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 3

	Number	Percentage
Total	1509	100.0
Household questionnaire completed (DB130 = 11)	1252	83.0
Interview not completed (DB130 = 21 to 24)	257	17.0
Total interview not completed (DB130 = 21 to 24)	257	100.0
Refusal to co-operate (DB130 = 21)	160	62.3
Entire household temporarily away for duration of fieldwork (DB130 = 22)	2	0.8
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	37	14.4
Other reasons (DB130 = 24)	58	22.6
Household questionnaire completed (DB135 = 1 + 2)	1252	100.0
Interview accepted for database (DB135 = 1)	1252	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 4

	Number	Percentage
Total	802	100.0
Household questionnaire completed (DB130 = 11)	769	95.9
Interview not completed (DB130 = 21 to 24)	33	4.1
Total interview not completed (DB130 = 21 to 24)	33	100.0
Refusal to co-operate (DB130 = 21)	15	45.5
Entire household temporarily away for duration of fieldwork (DB130 = 22)	1	3.0
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	4	12.1
Other reasons (DB130 = 24)	13	39.4
Household questionnaire completed (DB135 = 1 + 2)	769	100.0
Interview accepted for database (DB135 = 1)	769	100.0
Interview rejected (DB135 = 2)	0	0.0

2.3.3.4 Distribution of substituted units by ‘record of contact at address’ (DB120), by ‘household questionnaire result’ (DB130) and by ‘household interview acceptance’ (DB135), for each rotational group and for the total

No substitutions were made for EU-SILC 2011.

2.3.3.5 Item non-response

A summary of the item non-response household and personal income components are given in the tables below.

		Households having a positive amount		Households having a negative amount		Of which (before imputation)...					
						Full Information		Partial Information		Missing values	
		No.	%*	No.	%*	No.	%**	No.	%**	No.	%**
Total household income											
Total household gross income	HY010	4073	99.9	3	0.1	2757	67.6	1289	31.6	30	0.7
Total disposable household income	HY020	4070	99.9	6	0.1	2754	67.6	1292	31.7	30	0.7
Total disposable household income before social transfers except old age and survivors' benefits	HY022	4061	99.6	15	0.4	2791	68.5	1232	30.2	53	1.3
Total disposable household income before social transfers including old age and survivors' benefits	HY023	3907	95.9	169	4.1	2836	69.6	1136	27.9	104	2.6

Gross income components at household level											
Income from rental of property or land	HY040G	279	6.8	0	0.0	272	97.5	0	0.0	7	2.5
Interest, dividends, profit from capital investments in unincorporated business	HY090G	4076	100.0	0	0.0	3431	84.2	0	0.0	645	15.8
Family/Children related allowances	HY050G	1214	29.8	0	0.0	1214	100.0	0	0.0	0	0.0
Social exclusion not elsewhere classified	HY060G	2125	52.1	0	0.0	2125	100.0	0	0.0	0	0.0
Housing allowances	HY070G	625	15.3	0	0.0	625	100.0	0	0.0	0	0.0
Regular inter-household cash transfer received	HY080G	49	1.2	0	0.0	45	91.8	0	0.0	4	8.2
Interest repayments on mortgage	HY100G	528	13.0	0	0.0	525	99.4	0	0.0	3	0.6
Income received by people aged under 16	HY110G	12	0.3	0	0.0	12	100.0	0	0.0	0	0.0
Regular inter-household cash transfer paid	HY130G	44	1.1	0	0.0	41	93.2	0	0.0	3	6.8

Note:

* percentages are out of the total number of households for which the interview was accepted for the database i.e. 4,076

** percentages are out of the total number of households having received an amount (positive or negative) for that household income variable

		Persons 16+ having a positive amount		Persons 16+ having a negative amount		Of which (before imputation)...					
						Full Information		Partial Information		Missing values	
		No.	%*	No.	%*	No.	%**	No.	%**	No.	%**
Gross income components at personal level											
Gross employee cash or near cash income	PY010G	3993	42.2	0	0.0	3965	99.3	0	0.0	28	0.7
Gross non-cash employee income	PY020G	566	6.0	0	0.0	301	53.2	82	14.5	183	32.3
Company car	PY021G	116	1.2	0	0.0	116	100.0	0	0.0	0	0.0
Contributions to individual private pension plans	PY035G	1418	15.0	0	0.0	1404	99.0	0	0.0	14	1.0
Cash benefits or losses from self-employment	PY050G	696	7.4	21	0.2	673	96.7	0	0.0	44	6.3
Pension from individual private plans	PY080G	81	0.9	0	0.0	79	97.5	0	0.0	2	2.5
Unemployment benefits	PY090G	198	2.1	0	0.0	198	100.0	0	0.0	0	0.0
Old-age benefits	PY100G	2161	22.9	0	0.0	2161	100.0	0	0.0	0	0.0
Survivors' benefits	PY110G	109	1.2	0	0.0	109	100.0	0	0.0	0	0.0
Sickness benefits	PY120G	682	7.2	0	0.0	682	100.0	0	0.0	0	0.0
Disability benefits	PY130G	234	2.5	0	0.0	234	100.0	0	0.0	0	0.0
Education-related allowances	PY140G	651	6.9	0	0.0	583	89.6	45	6.9	23	3.5

Note:

* percentages are out of the total number of respondents (aged 16+) for which the interview was accepted for the database i.e. 9,454

** percentages are out of the total number of respondents (aged 16+) having received an

amount (positive or negative) for that household income variable

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

Not applicable for Malta.

2.4 Mode of data collection

The method of data collection in Malta is completely through face-to-face interviews, by means of CAPI method, with an element of proxy interviews when this was unavoidable.

Distribution of household members aged 16 or over by 'data status' (RB250)

The data status for all persons in the R-file aged 16 and over was set to 11 (information completed only from interview). This is due to the fact that when a household was contacted, all persons residing in that household were interviewed.

Distribution of household members aged 16 and over by 'type of interview' (RB260)

Total households

	Total	PAPI (RB260 = 1)	CAPI (RB260 = 2)	CATI (RB260 = 3)	Self- administered by respondent (RB260 = 4)	Proxy interview (RB260 = 5)	Missing
Total	9454	0	7340	0	0	2114	0
%	100.0	0.0	77.6	0.0	0.0	22.4	0.0

Rotational Group 1

	Total	PAPI (RB260 = 1)	CAPI (RB260 = 2)	CATI (RB260 = 3)	Self- administered by respondent (RB260 = 4)	Proxy interview (RB260 = 5)	Missing
Total	2503	0	1893	0	0	610	0
%	100.0	0.0	75.6	0.0	0.0	24.4	0.0

Rotational Group 2

	Total	PAPI (RB260 = 1)	CAPI (RB260 = 2)	CATI (RB260 = 3)	Self- administered by respondent (RB260 = 4)	Proxy interview (RB260 = 5)	Missing
Total	2257	0	1739	0	0	518	0
%	100.0	0.0	77.0	0.0	0.0	23.0	0.0

Rotational Group 3

	Total	PAPI (RB260 = 1)	CAPI (RB260 = 2)	CATI (RB260 = 3)	Self- administered by respondent (RB260 = 4)	Proxy interview (RB260 = 5)	Missing
Total	2951	0	2359	0	0	592	0
%	100.0	0.0	79.9	0.0	0.0	20.1	0.0

Rotational Group 4

	Total	PAPI (RB260 = 1)	CAPI (RB260 = 2)	CATI (RB260 = 3)	Self- administered by respondent (RB260 = 4)	Proxy interview (RB260 = 5)	Missing
Total	1743	0	1349	0	0	394	0
%	100.0	0.0	77.4	0.0	0.0	22.6	0.0

2.5 Interview duration

As per Commission Regulation No. 28/2004, the mean interview duration per household is calculated by adding up the sum of the duration of all household interviews (HB100) and the sum of the duration of all personal interviews (PB120) and then dividing by the number of household questionnaires completed and accepted for the database (DB135). The average interview duration for EU-SILC 2011 amounted to 48.5 minutes.

3 Comparability

All minor departures in the definitions between the national concepts applied in the Maltese EU-SILC 2011 and the standard EU-SILC concepts are listed in the following section. There are in fact very few such points since the Maltese EU-SILC team has

always tried to ensure that most national concepts coincide with EU-SILC methodology, for the sake of comparability.

3.1 Basic concepts and definitions

Reference population

No departure from the common definition i.e. the reference population is composed of all private households and their current members residing in Malta at the time of data collection. Persons living in institutions are excluded from the target population.

Private household definition

No departure from the common definition i.e. a private household is defined as a person living alone or a group of people who live together in the same private dwelling and share expenditures, including the joint provision of the essentials of living.

Household membership

A person is a household member if s/he is usually resident in that particular dwelling and shares in household expenses. Persons who are temporarily absent for reasons of holiday, travel, work, health, education or similar are included as long as the persons do not intend to stay away for more than 6 months.

Income reference period used

The income reference period used for EU-SILC 2011 was calendar year 2010.

Period for taxes on income and social insurance contributions

The tax on income and social insurance contributions reference period was the same as the income reference period i.e. calendar year 2010.

Regular taxes on wealth

The variable on regular taxes on wealth is not applicable for Malta

Lag between income reference period and current variables

The data collection was carried out between 1st July and 31st October 2011. Thus the lag between income reference period and current variables spans between 6 and 10 months, depending on the date of interview for each household. We did not succeed in limiting the interval to 8 months due to practical problems in data collection.

Total duration of data collection of the sample

As stated above, data collection was carried out between 1st July and 31st October 2011.

Basic information on activity status during the income reference period

The information was gathered through a question in the questionnaire where the respondents were asked to give us their activity status for every month of the income reference period (i.e. calendar year 2010).

3.2 Components of income

3.2.1 Differences between the national definitions and standard EU-SILC definitions

For the following components, the same definitions as standard EU-SILC were used:

- Total household gross income
- Total disposable household income
- Total disposable household income, before social transfers other than old-age and survivors' benefits
- Total disposable household income, before social transfers including old-age and survivors' benefits
- Income from rental of property or land
- Family/children-related allowances
- Social exclusion payments not elsewhere classified
- Housing allowances
- Regular inter-household cash transfer received
- Interest, dividends, profit from capital investments in unincorporated business
- Interest paid on mortgages

- Income received by people aged under 16
- Regular inter-household cash transfer paid
- Tax on income and social insurance contributions
- Cash or near-cash employee income
- Non-cash employee income
- Cash profits or losses from self-employment (including royalties)
- Unemployment benefits
- Old-age benefits
- Survivors' benefits
- Sickness benefits
- Disability benefits
- Education-related allowances

Imputed rent

Data on imputed rent also became mandatory as from 2007. However, estimation of imputed rent values directly from EU-SILC data was not possible. This is due to the fact that the proportion of tenants renting at market price in Malta is rather low to enable the estimation of rent figures at reliable quality levels. On the basis of 2005 Census data, the National Accounts Unit of the NSO compiled a table of average imputed rent values for dwellings classified by size and type. These values were then attached to the EU-SILC datasets and used as estimates for the imputed rent.

Employers' social insurance contributions

The employers' social insurance contributions in Malta are exactly equal to the social contribution paid by the employee. Thus, there was no need to include any additional questions since this information can be extracted directly from the employee income questions.

The following income components have not been collected for reasons specified below:

Regular taxes on wealth

The variable on regular taxes on wealth is not applicable for Malta.

Repayments/receipts for tax adjustments

Since Malta has collected a combination of gross and net values for income components, the tax adjustments are included under the variable on tax on income and social contributions.

Gross monthly earnings for employees

This variable is not applicable to Malta, since we calculate the gender pay gap from other sources.

Value of goods for own consumption

Following discussions with EUROSTAT, as from the 2009 EU-SILC operation, it was agreed that this variable will not be submitted, since the value of goods produced for own consumption does not constitute a significant component of the total disposable income.

Optional employer's social insurance contributions

As per Eurostat's documentation, Description of Target Variables: Cross-sectional and Longitudinal (Doc EU-SILC 065), this variable is not collected in Malta as the compulsory employers' social insurance contributions represent more than 90% of the total amount of employers' social contributions (compulsory + optional).

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

The table below illustrates the distribution of the interviewed household members aged 16 and over by type of interview.

Type of interview	Number	%
Face to face interview – PAPI	0	0.0
Face to face interview – CAPI	7340	77.6
Proxy interview	2114	22.4
Missing	0	0
Total	9454	100.0

As was the procedure in previous SILC operations, data for the Maltese EU-SILC was collected using the CAPI method. This was complemented by the use of register data from various government departments, as described below.

Data on social benefits, were extracted from a register called System of Social Assistance and Benefits (SABS) database, owned by the Ministry for Family and Social Solidarity

(MFSS). This register includes the details of all individuals who are eligible to receive some form of social benefit and the value of the benefit received by each individual. The list of benefits as defined by the MFSS was merged to fit in with Eurostat definitions and income values from the same reference period as that covered by EU-SILC 2011 were used.

Social benefits obtained from the SABS database are:

PY090G – unemployment benefits

PY100G – old-age benefits

PY110G – survivor's benefits

PY120G – sickness benefits

PY130G – disability benefits

HY050G – family / children related allowances

HY060G – social exclusion not elsewhere classified

HY070G – housing allowances (only energy benefits were obtained from SABS)

PY140G, education related-allowances and part of HY070G, housing allowances are the only variables not available in the SABS database. These variables are collected from the households as part of the SILC interview.

Furthermore, as from EU-SILC 2008 the component of Total Housing Costs (HH070) composed of water and electricity bill payments was calculated using data on consumption units from the Water Services Corporation register.

As from last year, it became possible to use register data on income from work through the Department of Inland Revenue. Thus the variables PY010 (employee cash or near cash income) and PY050 (cash benefits or losses from self-employment) were compiled through a combination of register data and survey responses. By combining both sources, a better coverage for these two variables was ensured while consistency with data from previous years was also maintained.

Moreover, the SABS and Inland Revenue databases were also used in combination with SILC survey data for the variable HY090 (interest, dividends, profit from capital investments in unincorporated business). In this respect the SABS database only covers persons who receive social benefits as a result of means testing while the IRD database does not include interests & dividends for persons taxed at source on such income.

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

Information on income variables was obtained from a number of sub-questions for each income component. These sub-questions were modified slightly in the 2011 SILC questionnaire to eliminate any possible mis-interpretation. Respondents are asked:

- The frequency of payments to be reported (weekly, every fortnight, every 4 weeks, monthly, yearly)
- Whether gross or net amount will be given
- The amount of income at each payment
- Tax paid according to the payment given
- National insurance paid according to the payment given
- Number of payments received during the 12 months of income reference year

For each income component, definitions and notes on what exactly should be included, are incorporated in the questionnaire alongside the relevant questions. A further note reminding interviewers that the income reference period is 2010 also precedes each income related question.

3.2.4 The method used for obtaining income target variables in the required form

Although the questionnaire gives the option to collect either the gross or net income at each payment, interviewers are instructed to preferably report the gross value whenever this is possible. Thus, only a few net values are collected in cases where the respondent could not provide the gross income.

In such cases, in order to translate these net values into gross values, a table was constructed (using information on tax and national insurance contributions from the Department of Inland Revenue) which enabled the conversion from gross income values to the corresponding net income values, and vice versa.

The questionnaire is structured in such a way as to differentiate between income from the main and secondary job of the respondent. This distinction is important, since different tax and national insurance rates apply. Thus the validation of the collected tax data has to be carried out with this in mind.

4 Coherence

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

Each year, a number of variables collected from EU-SILC are compared with other data collected by the National Statistics Office having the same reference period for benchmarking purposes. Sources included National Accounts, Labour Force Survey and Government Finance. Annual aggregates provided by the Inland Revenue Department were also used to verify income from employment, interests and dividends.