Intermediate Quality Report

EU-SILC 2009

National Statistics Office
Malta

December 2010

Contents

1   Common cross-sectional European Union indicators

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

In accordance with the Commission Regulation No. 28/2004, this section presents an overview of the main cross-sectional indicators derived from EU-SILC 2009 in Malta.

Primary Laeken indicators of social cohesion EU-SILC 2009

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

%		Age			
		Total (0+)	0-17	18-64	65+
Sex	**Total**	15.1	20.7	12.7	19.0
	Male	14.7	-	11.6	20.5
	Female	15.6	-	13.8	17.8

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

%		Most frequent activity status				
		Employed	Not employed			
		Total employed	Total not employed	Unemployed	Retired	Other inactive
Sex	**Total**	6.0	21.0	33.9	19.2	20.5
	Male	7.5	23.1	35.6	21.1	21.6
	Female	3.1	19.9	29.7	11.2	20.3

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

Household Type			%
Total households			**15.1**
All households with no dependent children	Total 1 person households		12.6
		Male	19.4
		Female	20.7
		age < 65 yrs	24.3
		age 65+	17.1
	2 adults no dependent children	both age < 65 yrs	16.0
		at least one age 65+	22.2
	Other households with no dependent children		4.8
All households with dependent children	Total		17.2
	Single parent	at least 1 dependent child	53.6
	2 adults	1 dependent child	10.2
		2 dependent children	18.2
		3+ dependent children	33.1
	Other households with dependent children		10.4

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

Tenure status	%
Owner or rent-free	14.2
Tenant	20.0

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

Household type	Currency	At-risk-of-poverty threshold (illustrative values)
1 person household	NAC	5,961
2 adults 2 dependent children	NAC	12,519

Inequality of income distribution S80/S20 income quintile share ratio

S80/S20 income quintile ratio	4.1

Relative median at-risk-of-poverty gap

%		Age			
		Total (0+)	0-17	18-64	65+
Sex	**Total**	16.2	14.7	16.7	16.0
	Male	16.2	-	16.2	16.8
	Female	16.1	-	17.4	15.6

Dispersion around the risk-of-poverty threshold

%		Dispersion around the at-risk-of-poverty threshold		
		40% of median	50% of median	70% of median
Sex	**Total**	2.9	7.4	24.8
	Male	2.8	7.2	23.8
	Female	3.1	7.6	25.7

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**	23.1	31.1	20.5	24.1
	Male	22.6	-	19.1	25.4
	Female	23.6	-	21.9	23.1

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**	36.4	33.8	27.7	81.1
	Male	34.1	-	25.7	78.8
	Female	38.6	-	29.8	83.0

Inequality of income distribution: Gini coefficient

Gini coefficient	27.7

1.2   Other indicators

1.2.1   Equivalised disposable income

The mean equivalised disposable income for the year 2009 was €11,184.

1.2.2   The unadjusted gender pay gap

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

2   Accuracy

2.1   Sample design

2.1.1   Type of sampling design

The mechanism used for EU-SILC in Malta was that of a panel survey with a four-year rotational design, which requires the collection of information from a representative group of households for four consecutive years. This illustrates the structure that is being recommended by Eurostat to meet the combined cross-sectional and longitudinal requirements. For each subsequent year, the oldest panel will be replaced by a new panel that will be added to the sample.

Like in previous years, the sampling design for the new panel was that of a simple random sampling of dwellings. The sampling frame for EU-SILC is a register of persons and households which is maintained by NSO. This register is based on the Census of Population & Housing 2005 database and it is updated on a regular basis. Consequently the new panel, made up of 1,747 households, was selected from this register.   The rest of the gross sample was composed of 818 households whose year of entry into the sample was 2006, 968 households from 2007 and 1063 households from 2008.

2.1.2 Sampling units

The sampling units for EU-SILC in Malta are occupied private households composed of a number of persons who share their income and expenses. As stated above, the sampling frame for the EU-SILC was a register of persons and households based on the Census of Population & Housing 2005, which is regularly maintained by the NSO. After the sample selection, all the households were contacted and personal interviews were then conducted with all persons living in the household.

2.1.3 Stratification and sub stratification criteria

This section is not applicable, as stratified sampling was not used for the data collection of EU-SILC Malta.

2.1.4 Sample size and allocation criteria

By regulation, Member states have to achieve a minimum effective sample size of households and eligible persons (persons aged 16+) for the cross-sectional component. For Malta, this amounts to 3,000 households, corresponding to at least 7,000 persons aged 16 and over.

In 2009, the gross sample size (as selected by simple random sampling) for the Maltese EU-SILC was 4,596 households, yielding a sample of 4,569 eligible households. The 27 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

In Malta, a one-stage sampling design was implemented, where simple random sampling was used to select the list of dwellings to be interviewed. These made up the

new panel for 2009. The 3 panels chosen in each of the three years prior to 2009 were contacted again to complete the survey.

2.1.6   Sample distribution over time

Data collection was carried out between July and October 2009, with the sample being spread throughout the four months.

2.1.7   Renewal of sample: rotational groups

As recommended by Eurostat, in Malta the 4-year rotational design was utilized. This implies that each chosen panel of households will be selected to conduct the survey for four consecutive years; each year replacing the oldest panel by a new sample of households. As a particular example, the panels surveyed in 2008 were chosen during the years 2005 – 2008. Thus, in 2009, the panel chosen in 2005 was dropped and replaced by a new list of households. This indicates that each year there is an overlap of three panels over the previous years.

2.1.8   Weightings

Household population counts for 2009 serve as the basis for the calculation of weights. Every year NSO publishes total population estimates which are the result of annual population updates, basing on the Census 2005 figures. Estimates of the proportion of this population that is living in institutional households enables the derivation of the total population living in private households. This in turn leads to the count of private households for a particular year.

2.1.8.1   Design factor

Household design weights are defined as the inverse of the selection probability of households.

For new households (i.e. households participating in SILC for the first time in 2009) is the inverse of the probability of selection of the households. Post stratification weighting is by household size and district (LAU 1) is used in order to calculate these weights. Households that are non-residential addresses, permanently vacant dwellings,

institutional households (e.g. elderly homes) or do not actually exist are considered to be ineligible.

For old households (i.e. households participating in the survey for the second, third or fourth time in 2009), the design weight in SILC 2009 is equivalent to the cross-sectional weight computed in SILC 2008. Split households were given the same weight as the corresponding 'parent' households.

2.1.8.2   Non-response adjustments

For new households, the calculation of design weights incorporated an adjustment for non-response at individual level. In the remaining three panels (consisting of old households) the adjustment for attrition was carried out through post-stratification. The values of the variables used in the post-stratification were as at 2008 (i.e. these may not be necessarily the same as in the current situation). Specifically, the variables used for this were age-group (0-17, 18-24, 25-49, 50-64, 65+), sex and district (LAU 1) as at 2008. Non-sample persons in SILC 2009 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 1st and 9th deciles, thus reducing the range of the weights. The resulting weight was used as initial weight for the calibration step. 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
Singe parent household
Households with 2 adults, 1 - 2 children
Other households with dependent child
Number of persons in households by
Sex, and
10 year age-groups
The resulting weights fell in the interval [0.3×mean weight, 3×mean weight], and thus no further trimming and re-calibration were required.

2.1.8.4 Final cross-sectional weight

The CALMAR output results in the final cross-sectional weight. The following are some summary statistics for the final household cross-sectional weights:

Minimum	Maximum	Mean	Median	Standard deviation	Coefficient of variation
17.77	101.81	38.85	32.24	17.86	0.46

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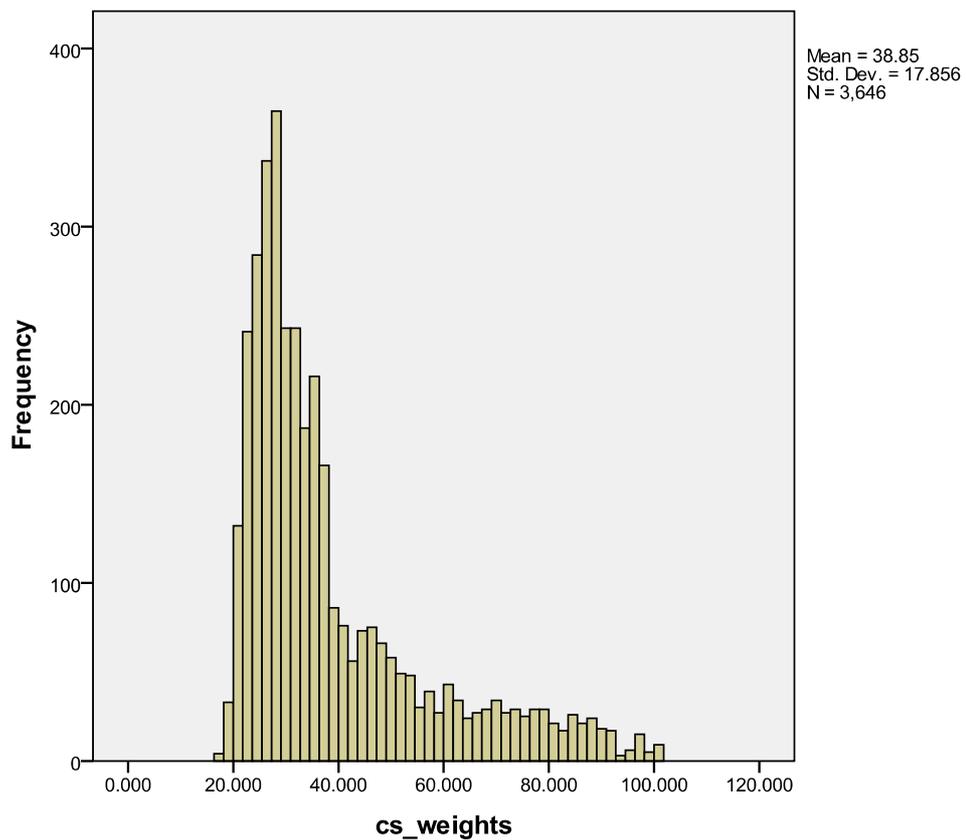
2.1.9 Substitutions

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) broken down by age and gender

Age	Sex	Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Total (0+)	Total	15.1	0.7	1.3	10213
	Male	14.7	0.7	1.4	5001
	Female	15.6	0.7	1.4	5212
0-17	Total	20.7	1.3	2.6	2044
	Male	21.2	1.6	3.2	1062
	Female	20.1	1.6	3.1	982
18-24	Total	11.3	1.2	2.3	982
	Male	11.7	1.5	3.0	504
	Female	10.8	1.6	3.1	478
25-49	Total	12.5	0.7	1.4	3135
	Male	10.9	0.7	1.4	1543
	Female	14.1	0.8	1.6	1592
50-64	Total	13.6	1.0	2.0	2414
	Male	12.5	1.1	2.2	1171
	Female	14.7	1.2	2.3	1243
65+	Total	19.0	1.6	3.1	1638
	Male	20.5	1.9	3.7	721
	Female	17.8	1.6	3.2	917
18+	Male	13.0	0.6	1.3	3939
	Female	14.6	0.7	1.3	4230
18-64	Male	11.6	0.6	1.3	3218
	Female	13.8	0.7	1.4	3313

| 0-64 | Male | 13.8 | 0.7 | 1.5 | 4280 |
| | Female | 15.2 | 0.8 | 1.5 | 4295 |

'At-risk-of poverty rates' (after social transfers) broken down 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	3602
	Male	7.5	0.5	1	2399
	Female	3.1	0.5	0.9	1203
Unemployed	Total	33.9	3.2	6.2	272
	Male	35.6	3.7	7.3	194
	Female	29.7	5.5	10.7	78
Retired	Total	19.2	1.4	2.8	1289
	Male	21.1	1.6	3.1	1027
	Female	11.2	2.2	4.4	262
Other inactive	Total	20.5	1.0	2.0	3277
	Male	21.6	2.6	5.2	460
	Female	20.3	1.0	2.0	2817

'At-risk-of poverty rates' (after social transfers) broken down by tenure status

Tenure status	Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Owner or rent-free	14.2	0.7	1.4	8552
Tenant	20.0	1.8	3.5	1661

'At-risk-of poverty rates' (after social transfers) broken down by household type

Household Type			Value	Sampling error	Margin of error (95% CI)	Sample size (persons)
Total			**15.1**	0.7	1.3	10213
All households with no dependent children	**Total**		**12.6**	**0.8**	**1.5**	4657
	1 person households	Total	20.2	1.7	3.4	671
		M	19.4	2.3	4.6	230
		F	20.7	2.3	4.5	441
		age < 65 yrs	24.3	2.5	4.9	276
		age 65+	17.1	2.2	4.3	395
	2 adults no dependent children	both age < 65 yrs	16.0	2.0	4.0	852
		at least one age 65+	22.2	2.2	4.4	1124
	Other households with no dependent children		4.8	0.9	1.7	2010
All households with dependent children	**Total**		17.2	**1.0**	**2.0**	5556
	Single parent	at least 1 dep. child	53.6	6.0	11.7	294
	2 adults	1 dep. child	10.2	1.5	3.0	942
		2 dep. children	18.2	2.0	3.8	1900
		3+ dep. children	33.1	4.1	8.1	640
	Other households with dependent children		10.4	1.6	3.1	1780

'At-risk-of poverty rates' (after social transfers) broken down 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	33.4	2.8	5.6	900
	0 < WI < 1	5	0.8	1.7	1855
	WI = 1	2.3	0.7	1.3	836
All households with dependent children	WI = 0	64.6	5.2	10.1	444
	0 < WI < 0.5	31.8	4.3	8.5	554
	0.5 <= WI < 1	16.2	1.4	2.8	3008
	WI = 1	3.5	0.8	1.6	1545

Median equivalised disposable income

Median value (€)	Standard error	Sample size (persons)
9935	104.6	10213

2.3 Non-sampling errors

2.3.1 Sampling frame and coverage errors

The Census of Population & Housing 2005 database includes a comprehensive count of all persons and households living in Malta and Gozo in 2005. As it is being updated annually since it was conducted, it was decided that this database could serve as a good proxy for a sampling frame of all households in Malta. Hence, it was used to extract the EU-SILC sample of new households for Malta.

Despite this, 27 households, corresponding to 0.6 per cent of the total sample selected, were found to be ineligible addresses.

2.3.2 Measurement and processing errors

2.3.2.1 Measurement errors

Measurement errors can be defined as the variation between the recorded value given by the respondent (which might not be the actual value) and the true but unknown value of the given variable. Such errors can originate from different sources, mainly associated with the questionnaire and the data collection. Certain problems that have been identified beforehand were kept in mind during the preparation of the data collection so as to be avoided.

Questionnaire

The national EU-SILC questionnaire for 2009 was formulated according to the EU-SILC regulation. Updates in Eurostat definitions and recommendations were taken into consideration to make it more convenient for both the interviewers and household members. Where deemed necessary, to avoid misinterpretation by interviewers, amendments in the wording of certain questions were made in order to include all essential information to answer the questions. As in previous years, feedback from interviewers conducting the survey during the preceding year were taken on board to lessen the difficulties of the respondents and in consequence aiming at reducing the average duration of interviewing.

Interviewers

The specific training for EU-SILC was performed in various stages. Initially, the interviewers were presented with background information about the survey, time limits and a brief introduction to some of the fundamental questions. During the briefing session, officials from the office went through the questionnaire intensively and details for each question were given to explain how the data collection should be conducted. As the EU-SILC data collection was conducted using the CAPI technique (Computer Assisted Personal Interviewing), the next stage was to provide comprehensive assistance on how they should go about with the data entry. Whenever difficulties were encountered, interviewers were encouraged to seek assistance from officials at the office to give the necessary clarifications. Despite all the assistance given, an element of human error could still may still be present during the data collection. Automated validations were thus created to guide the interviewers in such circumstances. As a

quality check, household audits were regularly conducted to make sure that all the work has been performed as instructed.

Respondents

One of the main problems encountered during data collection was mainly related to response burden. In such a small country like Malta, where a considerable number of surveys require the respondents' cooperation, this survey bears a heavy burden on the household members. In addition to this, despite our emphasis on the fact that the Malta Statistics Act ensures full confidentiality, some respondents still fear that they may be identified through their responses. Although, on the whole, respondents were cooperative, interviewers occasionally came across certain persons who were reluctant to co-operate. This was mainly due to the sensitivity of the subject and the fact that households are interviewed for four consecutive years. Even though all efforts have been made to minimise proxy interviews, interviewers were still allowed to use proxy and telephone interviews to reduce non-response.

In order to reduce attrition, the NSO organized a lottery for all households that were participating for the second, third and fourth time. The winning prize was a holiday for two including flights and accommodation. This was done in an attempt to diminish the affect of non-response due to panel attrition.

In a further attempt to reduce response burden, basic information of members in 'old households' that remain the same from one year to another, such as gender, date of birth and citizenship, was uploaded in the data-entry application which was used during data collection, in advance. In this way, interviewers do not have to ask this data again but just verify it with the household members.

2.3.2.2 Processing errors

All data collection was conducted face-to-face using CAPI techniques, and Blaise was the chosen software to produce the data entry application that includes the questions together with the definitions and instructions incorporated with the interviewer's aid. The program also had computer validations of the individual data being inputted to prevent processing errors and human errors. These involved logic and consistency checks with previous data and between the questions themselves, as well as checks for extreme values. Moreover, the computer application was designed in such a way that for any error encountered, a dialog box displaying the error message popped up.

Despite this, the program allowed error suppression so as to cater for exceptional responses. The application also automated the routing of the program, which helped the interviewers in completing the survey and unintentionally avoiding or omitting certain questions. Therefore, the program was very accurate and left little room for error, while at the same time speeding 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.

Separate training sessions were given to the interviewers to make them more familiar with the use of both the laptop and the application itself. Apart from this, interviewers were instructed to take regular backups of encrypted data that have been collected from the respondents on a pen drive that was provided to them. This measure was taken in order to prevent loss of data, in case of any damage that may occur to the laptop.

Moreover, fictitious 'test' households were created in each laptop and interviewers were encouraged to experiment inputting data so as to be familiar with the process before interviewing the actual households.

The data collection process was co-ordinated entirely by the NSO. This included the recruitment, training and monitoring of interviewers. Regular audits were carried out on a sub-sample of households throughout the data collection period. There were instances where these audits revealed negligence or inappropriate behaviour from interviewers. In such cases, disciplinary action was taken as required.

2.3.3 Non-response errors

2.3.3.1 Achieved sample size

Total households

	Total
Number of accepted household interviews	3,646
Number of persons 16 years and older	8,485

Rotational Group 1

	Total
Number of accepted household interviews	690
Number of persons 16 years and older	1,665

Rotational Group 2

	Total
Number of accepted household interviews	1,226
Number of persons 16 years and older	2,888

Rotational Group 3

	Total
Number of accepted household interviews	832
Number of persons 16 years and older	1,856

Rotational Group 4

	Total
Number of accepted household interviews	898
Number of persons 16 years and older	2,076

2.3.3.2 Unit non-response

Household non-response rates (NRh)

The address contact rate (R_a) is given by:

$$R_a = \frac{\sum[DB120=11]}{\sum[DB120=all] - \sum[DB120=23]} = \frac{4418}{4596-27} = 0.967$$

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

$$R_h = \frac{\sum[DB135=1]}{\sum[DB130=all]} = \frac{3646}{4418} = 0.825$$

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

$$NR_h = (1-(R_a * R_h))*100 = (1-(0.967*0.825))*100 = 20.2\%$$

Individual non-response rate (*NRp*)

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

$$R_p = \frac{\sum [RB250 = 11 + 12 + 13]}{\sum [RB245 = 1 + 2 + 3]} = \frac{8485}{8485} = 1$$

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 (*NRp*)

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

$$NR_p = (1 - (R_a * R_h * R_p)) * 100 = (1 - (0.967 * 0.825 * 1)) * 100 = 20.2\%$$

The rates are now computed for the new replications only.

Non-response rates for new replications

Household non-response rate (*NRh*)

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

$$R_a = \frac{\sum [DB120 = 11]}{\sum [DB120 = all] - \sum [DB120 = 23]} = \frac{1639}{1747 - 19} = 0.948$$

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

$$R_h = \frac{\sum[DB135=1]}{\sum[DB130=all]} = \frac{1226}{1639} = 0.748$$

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

$$NR_h = (1-(R_a * R_h))*100 = (1-(0.948*0.748))*100 = 29.1\%$$

Individual non-response rate (*NRp*)

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

$$R_p = \frac{\sum[RB250=11+12+13]}{\sum[RB245=1+2+3]} = \frac{2888}{2888} = 1$$

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 (*NRp*)

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

$$NR_p = (1-(R_a * R_h * R_p))*100 = (1-(0.948*0.748*1))*100 = 29.1\%$$

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)	4,596	100.0
Address contacted (DB120 = 11)	4,418	96.1
Address non-contacted (DB120 = 21 to 23)	178	3.9
Total address non-contacted (DB120 = 21 to 23)	178	100.0
Address cannot be located (DB120 = 21)	83	46.6
Address unable to access (DB120 = 22)	68	38.2
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	27	15.2

Rotational Group 1

	Number	Percentage
Total (DB120 = 11 to 23)	818	100.0
Address contacted (DB120 = 11)	790	96.6
Address non-contacted (DB120 = 21 to 23)	28	3.4
Total address non-contacted (DB120 = 21 to 23)	28	100.0
Address cannot be located (DB120 = 21)	17	60.7
Address unable to access (DB120 = 22)	8	28.6
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	3	10.7

Rotational Group 2

	Number	Percentage
Total (DB120 = 11 to 23)	1,747	100.0
Address contacted (DB120 = 11)	1,639	93.8
Address non-contacted (DB120 = 21 to 23)	108	6.2
Total address non-contacted (DB120 = 21 to 23)	108	100.0

	Number	Percentage
Address cannot be located (DB120 = 21)	40	37.0
Address unable to access (DB120 = 22)	49	45.4
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	19	17.6

Rotational Group 3

	Number	Percentage
Total (DB120 = 11 to 23)	968	100.0
Address contacted (DB120 = 11)	953	98.5
Address non-contacted (DB120 = 21 to 23)	15	1.5
Total address non-contacted (DB120 = 21 to 23)	15	100.0
Address cannot be located (DB120 = 21)	9	60.0
Address unable to access (DB120 = 22)	3	20.0
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	3	20.0

Rotational Group 4

	Number	Percentage
Total (DB120 = 11 to 23)	1,063	100.0
Address contacted (DB120 = 11)	1,036	97.5
Address non-contacted (DB120 = 21 to 23)	27	2.5
Total address non-contacted (DB120 = 21 to 23)	27	100.0
Address cannot be located (DB120 = 21)	17	63.0
Address unable to access (DB120 = 22)	8	29.6
Address does not exist or is non-residential address or is unoccupied or not principal residence (DB120 = 23)	2	7.4

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

Total households

	Number	Percentage
Total	4,418	100.0
Household questionnaire completed (DB130 = 11)	3,646	82.5
Interview not completed (DB130 = 21 to 24)	772	17.5
Total interview not completed (DB130 = 21 to 24)	772	100.0
Refusal to co-operate (DB130 = 21)	401	51.9
Entire household temporarily away for duration of fieldwork (DB130 = 22)	22	2.8
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	40	5.2
Other reasons (DB130 = 24)	309	40.0
Household questionnaire completed (DB135 = 1 + 2)	3646	100.0
Interview accepted for database (DB135 = 1)	3646	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 1

	Number	Percentage
Total	790	100.0
Household questionnaire completed (DB130 = 11)	690	87.3
Interview not completed (DB130 = 21 to 24)	100	12.7
Total interview not completed (DB130 = 21 to 24)	100	100.0
Refusal to co-operate (DB130 = 21)	57	57.0
Entire household temporarily away for duration of fieldwork (DB130 = 22)	5	5.0
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	5	5.0
Other reasons (DB130 = 24)	33	33.0
Household questionnaire completed (DB135 = 1 + 2)	690	100.0
Interview accepted for database (DB135 = 1)	690	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 2

	Number	Percentage
Total	1639	100.0
Household questionnaire completed (DB130 = 11)	1226	74.8
Interview not completed (DB130 = 21 to 24)	413	25.2
Total interview not completed (DB130 = 21 to 24)	413	100.0
Refusal to co-operate (DB130 = 21)	193	46.7
Entire household temporarily away for duration of fieldwork (DB130 = 22)	7	1.7
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	21	5.1
Other reasons (DB130 = 24)	192	46.5
Household questionnaire completed (DB135 = 1 + 2)	1226	100.0
Interview accepted for database (DB135 = 1)	1226	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 3

	Number	Percentage
Total	953	100.0
Household questionnaire completed (DB130 = 11)	832	87.3
Interview not completed (DB130 = 21 to 24)	121	12.7
Total interview not completed (DB130 = 21 to 24)	121	100.0
Refusal to co-operate (DB130 = 21)	61	50.4
Entire household temporarily away for duration of fieldwork (DB130 = 22)	3	2.5
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	10	8.3
Other reasons (DB130 = 24)	47	38.8
Household questionnaire completed (DB135 = 1 + 2)	832	100.0
Interview accepted for database (DB135 = 1)	832	100.0
Interview rejected (DB135 = 2)	0	0.0

Rotational Group 4

	Number	Percentage
Total	1036	100.0
Household questionnaire completed (DB130 = 11)	898	86.6
Interview not completed (DB130 = 21 to 24)	138	13.3
Total interview not completed (DB130 = 21 to 24)	138	100.0
Refusal to co-operate (DB130 = 21)	90	65.2
Entire household temporarily away for duration of fieldwork (DB130 = 22)	7	5.1
Household unable to respond (illness, incapacity, etc) (DB130 = 23)	4	2.9
Other reasons (DB130 = 24)	37	26.8
Household questionnaire completed (DB135 = 1 + 2)	898	100.0
Interview accepted for database (DB135 = 1)	898	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 2008.

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	3646	100.0	0	0.0	2516	69.0	1092	30.0	38	1.0
Total disposable household income	HY020	3644	99.9	2	0.1	2263	62.1	799	21.9	584	16.0
Total disposable household income before social transfers except old age and survivors' benefits	HY022	3641	99.9	5	0.1	2209	60.6	1317	36.1	120	3.3
Total disposable household income before social transfers including old age and survivors' benefits	HY023	3574	98.0	72	2.0	2169	59.5	1358	37.2	119	3.3

Gross income components at household level										
Income from rental of property or land	HY040G	238	6.5	0	0.0	204	85.7	0	0.0	34	14.3
Interest, dividends, profit from capital investments in unincorporated business	HY090G	3646	100.0	0	0.0	2757	75.6	0	0.0	889	24.4
Family/Children related allowances	HY050G	1173	32.2	0	0.0	1173	100.0	0	0.0	0	0.0
Social exclusion not elsewhere classified	HY060G	1859	51.0	0	0.0	1859	100.0	0	0.0	0	0.0
Housing allowances	HY070G	654	17.9	0	0.0	653	99.8	0	0.0	1	0.2
Regular inter-household cash transfer received	HY080G	55	1.5	0	0.0	53	96.4	0	0.0	2	3.6
Interest repayments on mortgage	HY100G	418	11.5	0	0.0	410	98.1	0	0.0	8	1.9
Income received by people aged under 16	HY110G	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Regular inter-household cash transfer paid	HY130G	39	1.1	0	0.0	29	74.4	0	0.0	10	25.6

Note:

* percentages are out of the total number of households for which the interview was accepted for the database i.e. 3,646
** 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	3420	40.3	0	0.0	3377	98.7	0	0.0	43	1.3
Gross non-cash employee income	PY020G	654	7.7	0	0.0	441	67.4	57	8.7	156	23.9
Company car	PY021G	112	1.3	0	0.0	112	100.0	0	0.0	0	0.0
Contributions to individual private pension plans	PY035G	782	9.2	0	0.0	772	98.7	0	0.0	10	1.3
Cash benefits or losses from self-employment	PY050G	568	6.7	2	0.0	463	81.2	0	0.0	107	18.8
Value of goods produced for own consumption	PY070G	-	-	-	-	-	-	-	-	-	-
Pension from individual private plans	PY080G	60	0.7	0	0.0	57	95.0	0	0.0	3	5.0

Unemployment benefits	PY090G	190	2.2	0	0.0	160	84.2	0	0.0	30	15.8
Old-age benefits	PY100G	1760	20.7	0	0.0	1671	94.9	0	0.0	89	5.1
Survivors' benefits	PY110G	87	1.0	0	0.0	87	100.0	0	0.0	0	0.0
Sickness benefits	PY120G	674	7.9	0	0.0	672	99.7	0	0.0	2	0.3
Disability benefits	PY130G	261	3.1	0	0.0	259	99.2	0	0.0	2	0.8
Education-related allowances	PY140G	520	6.1	0	0.0	445	85.6	35	6.7	40	7.7

Note:
* percentages are out of the total number of respondents (aged 16+) for which the interview was accepted for the database i.e. 8,485
** 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

Data collection was carried out entirely through face-to-face CAPI, with an element of proxy interviews when this was unavoidable. Furthermore, for a number of variables the interviews were supplemented with data from administrative registers. The variables concerned are most of the social benefits and one of the components of housing costs.

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

The data status is set to 11 for all persons aged 16 and over listed in the R-file, denoting that information is being 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	8,485	0	5,838	0	0	2,647	0
%	100.0	0.0	68.8	0.0	0.0	31.2	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	1,665	0	1,089	0	0	576	0
%	100.0	0.0	65.4	0.0	0.0	34.6	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	2,888	0	2,040	0	0	848	0
%	100.0	0.0	70.6	0.0	0.0	29.4	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	1,856	0	1,247	0	0	609	0
%	100.0	0.0	67.2	0.0	0.0	32.8	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	2,076	0	1,462	0	0	614	0
%	100.0	0.0	70.4	0.0	0.0	29.6	0

2.5   Interview duration

According to the Commission Regulation No. 28/2004, the mean interview duration per household is estimated by summing up the total duration of all household interviews (HB100) and the total duration of all personal interviews (PB120) and then dividing by the number of completed household questionnaires accepted for the database (DB135). Following this procedure, the average interview duration for EU-SILC 2009 was estimated at 47.8 minutes.

3   Comparability

This section underlines any minor departures in the definitions between the national concepts applied in the Maltese EU-SILC 2009 and the standard EU-SILC concepts. However, for comparability, Malta ensured that most national concepts coincide with EU-SILC.

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 2009 was calendar year 2008.

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 2008.

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 2009. 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 2009.

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 2008).

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 than attached to the EU-SILC datasets and used as estimates for the imputed rent.

Employers' social insurance contributions

For Malta the employers' social insurance contributions is exactly equal to the social contribution paid by the employee plus subsidies paid by the employer on private health insurance, house insurance and life insurance. However, the private retirement plans and other employer insurance schemes were not collected for EU-SILC 2009. This will be amended for EU-SILC 2010.

Optional employer's social insurance contributions

For this variable, Malta included subsidies paid by the employer on private health insurance, house insurance and life insurance. However, the private retirement plans and other employer insurance schemes were not collected for EU-SILC 2009. This will be amended for EU-SILC 2010.

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, 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.

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

The following table summarizes the distribution of the interviewed household members aged 16 and over by the various data collection method:

Type of interview	Number	%
Face to face interview - PAPI	0	0.0
Face to face interview - CAPI	5838	68.8
Proxy interview	2647	31.2
Missing	0	0
Total	8485	100.0

As in previous years, all data for the Maltese EU-SILC has been collected with the assistance of laptops (CAPI), with the exception of data on social benefits that was obtain from the SABS database (System of Social Assistance and Benefits).   This

registered database has been acquired from the Ministry for Family and Social Solidarity (MFSS) and covered the same reference period as EU-SILC 2009. This database contains details of all individuals who are eligible to receive some form of social benefit. Details of these benefits were provided by individual benefit as defined by the MFSS and these were then merged by the NSO according to Eurostat definitions. Moreover, for those persons who receive social benefits by means testing, interests and dividends were also provided from another database.

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, so this will continue to be collected from interviews.

Apart from this, as from last year (EU-SILC 2008) we also calculated the water and electricity (as part of the Total Housing Costs (HH070)) consumption units using registered data obtained from the Water Services Corporation.

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 are given below:

Number of payments during the 12 months
Gross income at each payment
Net income at each payment
Tax paid per payment received
National insurance paid per payment received

Prior to these sub-questions, a specific question has been included in the questionnaire specifically aimed to remind the interviewers that the income reference period was 2008. In addition to this, notes describing these income components were also included. With regards to the second and third sub-divisions, namely gross and net income at each payment, although the interviewer was expected to collect either one of these, during the briefing sessions it was emphasized that ideally they should collect the gross income rather than the net income. This was also indirectly illustrated in the order of the sub-questions mentioned above.

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

As stated above, during the data collection stage, officials from the office always highlighted the fact that collecting the gross income was preferred over the net income. Nonetheless, the former is not always available and interviewers do not have any alternative other than to collect the net income. In order to convert from net to gross income, a table was obtained from the Department of Inland Revenue showing the conversion of the corresponding net-gross values.

In order to help us validate collected tax data, respondents were asked several questions to serve as a guide when differentiating between the main and secondary job of the respondents. This was of vital importance as different tax bands apply depending on the type of job.

4 Coherence

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

Coherence refers to the comparison between the variables collected from EU-SILC to a number of other data collected by the National Statistics Office for benchmarking purposes. Sources included National Accounts, Labour Force Survey and Government Finance data. Aggregate figures from the Inland Revenue Department have also been used.