**Documentation of statistics for
Welfare Indicators 2017**

1 Introduction

The purpose of the indicators of welfare is to provide a statistics on the populations income, living conditions and risk of social exclusion. The survey has from 2005 been conducted in all EU member states following the same guidelines. In Denmark the survey has been conducted since 2003. The statistics on Welfare indicators is just a small part of the EU-SILC (Statistics on income and living conditions). The survey is primarily disseminated by Eurostat.

2 Statistical presentation

The survey collects information on the composition of the households and their living conditions including questions on how easy it is for the household to make ends meet and the financial burden of the housing costs. Further information is collected on health conditions and position on the labour market etc. These interview questions are then supplemented by a lot of register based information, mainly on incomes and demographics. It should be stressed that in case register based information is available we recommend the use of the register data instead of basing analysis on the SILC-sample.

2.1 Data description

The welfare indicators are based on the SILC-sample of 6.000 households. It's a longitudinal survey based on 4 year panels.

In Welfare Indicators the following two interview questions are used:

- Thinking of your household's total income, is your household able to make ends meet, namely, to pay for its usual necessary expenses?
- Please think your total housing costs including mortgage repayment (installment and interest) or rent, insurance and service charges (sewage removal, refuse removal, regular maintenance, repairs and other charges). To what extent are these costs a financial burden to you?

The answers to these questions are then grouped according to age, sex, socioeconomic status, income and household type.

2.2 Classification system

Classifications in the Statbank: Socioeconomic status: Children, Students, Employed, Non-working incl. disability pensioners, Old-age pensioners incl. voluntary early retirement.

Type of household: Single persons without children, Single persons with children, Couples without children, Couples with children, Other types of households.

Incomes: The quintiles are defined based on equivalised disposable income from the previous year.

2.3 Sector coverage

Household sector - only private households. Collectives, institutions etc. are not included

2.4 Statistical concepts and definitions

Age: Age at the beginning of the survey year.

Socioeconomic status: Socioeconomic status of the main breadwinner.

Household type: Household type.

2.5 Statistical unit

Persons.

2.6 Statistical population

Persons in private households excl. institutions, etc.

2.7 Reference area

Denmark.

2.8 Time coverage

Annually 2004-2016

2.9 Base period

Not relevant for this statistics.

2.10 Unit of measure

Percent of total number of persons in private households.

2.11 Reference period

Time of interview is March-June in the year. Incomes refers to the year prior. The rest of the indicators are measured at the time of the interview. The reference year in publications are the year in which the interview was conducted.

2.12 Frequency of dissemination

Yearly.

2.13 Legal acts and other agreements

The data collection adhere to Law on Statistics Denmark and the EU-regulation.

2.14 Cost and burden

As the participation is voluntary there is no information on the response burden. As register based data is used very much the burden for the participating household will be much smaller than in countries where register based data is not available.

2.15 Comment

No other information available.

3 Statistical processing

The subjective data from the interviews are combined with the register based data using the Central personal Register. To adjust for non-response bias, weights are computed and assigned to respondents. This ensures that the survey population match the Danish population on demographics and income levels.

3.1 Source data

The primary source for the data is interviews with 6.000 households. The interview data are combined with administrative registers to form the EU-SILC datasets.

3.2 Frequency of data collection

Yearly.

3.3 Data collection

74 percent of the interview data is collected via web interviews. If the selected respondent have not responded within a shorter period a letter are mailed out reminding on the survey. If this does not give any reply the respondent are called by phone and the interview is conducted. Afterwards the data are supplemented by register based data.

3.4 Data validation

The interview data are validated at the interviewing in a way so, say not existing codes cannot be used. When asked to provide amounts, i.e. the monthly rent, filters give the respondent the option to change his answer, if the answer differs to much from the norm.

3.5 Data compilation

The resopondents are assigned weights to correct for non-response bias. The weights are constructed using register data. For the data used for the publication in Denmark no other special data treatment is relevant.

3.6 Adjustment

Not relevant for this statistics.

4 Relevance

SILC is primarily used by Eurostat and the European commissions. Users of the statistics published in Denmark are mainly the press.

4.1 User Needs

In Denmark only a small part of SILC is published. The main element of SILC are the income indicators. For Denmark however it's recommended to use our full population registers unless you are doing international comparisons. The same goes for other areas for which full population registers exist. The most important users of the SILC are Eurostat and other European Commisions. In Denmark the primary users are the press and the ministry of Social Affairs.

4.2 User Satisfaction

User satisfaction are not measured systematically in Denmark. Feedback in Eurostat is mainly focused on timeliness and further needs for regional data. Danish users have the option to comment on SILC at an annual user comittee meeting, covering many different statistics. Apart from this we occasionally are in contact with users by phone, if they have questions regarding the statistics we published.

4.3 Data completeness rate

Statistics Denmark comply with the EU regulation and adhere to the Eurostat guidelines for the indicators disseminated in Denmark.

5 Accuracy and reliability

The sample size is about 16.000 households of which about 6.000 participates. In addition to sampling errors there might be a slight risk of bias. Especially on subgroups , I.E. for 20-29 year olds there can be large statistical uncertainties.

5.1 Overall accuracy

As SILC is based on a sample of persons/household there are some statistical uncertainty related to the data. This is partly due to the presence of statistical uncertainty and partly due to the risk of biases. A calibration of the survey is carried out in order to limit any bias and make sure that the sample reflects the population on factors such as demographics and incomes. For the published variables on making ends meet and the burden of housing costs, the effect and risk of bias is assumed to be negligible due to the strong correlation with incomes.

5.2 Sampling error

The following confidence intervals is calculated on the total population in 2015. If smaller sub-populations for instance a specific age-group is selected, then the standard errors will be relatively larger, due to the smaller sample size.

Table 95 pct. confidence intervals, 2015-data:

Ability to make end meet

Answer Indicator CI-lower limit CI- upper limit Very hard, hard 10.4 9.3 11.5 Somewhat hard 18.5 17.3 19.9 Somewhat easy 30.2 28.8 31,6

Easy |25.8 |24.5 |27.1| |Very easy |14.9 |13.9 |15.9|

Burden of housing costs

Answer Indicator CI-lower limit CI-upper limit Heavy burden 9.1 8.1 10.1 Slight burden 30.2 28.8 31.6 No burden at all 60.6 59.1 62.1

5.3 Non-sampling error

With a response rate that is less than 40 percent, there is a risk of bias due to low response rates among certain groups. The survey is calibrated with respect to age and income, but there may still be an underrepresentation among immigrants for instance. Persons living in collective households, institution and homeless, at the time of sampling, will most often not be part of the sampling frame and thus won't be invited to participate in SILC.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

5.6 Quality assessment

The results are based on interviews with 6.000 households total. Note that for small sub-population for instance age-groups it is important to be vary of sampling errors as the sample then is smaller. Annual changes for sub-groups should thus be interpreted with great care.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

Provisional figures are not published. A large revision has been carried out however. Read more on 'comparability over time'

Statistics Denmark is planning a revision for the 2020-SILC. This follows the expected adoption of new EU-regulations.

6 Timeliness and punctuality

The data is published about a year following the interview.

6.1 Timeliness and time lag - final results

The data is published about a year following the interview.

6.2 Punctuality

SILC has always been produced in a timely manor in later years. Regarding year N, Eurostat requires the final micro-data by November in year N+1. Denmark has since SILC-2008 been in compliance with this deadline.

7 Comparability

The published indicators are assumed comparable over time and between countries participating in the EU-SILC.

7.1 Comparability - geographical

As the Danish welfare indicators are a very small part of the EU-SILC survey the data can be compared to data from all other EU-countries and several other countries.

7.2 Comparability over time

The guidelines from Eurostat changes every year so for some of the data the comparability will not be perfect. But for the data published in Denmark no changes have been made in the guidelines. From 2013 the respondents has been interviewed on the web and by phone. Prior to 2013 the interviews was mainly conducted by phone.

In 2014 a revision of the SILC has been carried out. The revision mainly affects incomes and is not expected to have substantial effect on the indicators published in the Danish statbank. Read more about the [Revision](#) in Danish.

7.3 Coherence - cross domain

The Statbank indicators is strongly correlated with incomes and housing costs. However note that the indicators are subjective and thus may not follow trends in for example the incomes. Statistics Denmark have also published a statistics on Quality of Life in Denmark in 2015, this covers some of the same topics as SILC. SILC in general has it's main focus on incomes. It is worth noting that the national Danish estimates for mean disposable income, inequality etc. differs from Eurostats SILC, due to differences in the definition in family and the income concepts. More information is available in Danish in the the annual income publication, chapter 8 in the 2014-edition.

7.4 Coherence - internal

The household composition is defined by the respondent at the time of the interview. Data for SILC is a mix between interview and register data. The register variables is from the latest available reference time prior to the time of the interview.

8 Accessibility and clarity

Some main figures are published in Nyt fra Danmarks Statistik and in the statbank. Eurostat publish many figures in the Eurostat database.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.4 News release

Nyt fra Danmarks Statistik.

8.5 Publications

Statistical Yearbook.

8.6 On-line database

The statistics are published in the StatBank under the subject in the following tables:

- [SILC1P](): Household members by sex, age, how easy it is for households to make ends meet and time
- [SILC2P](): Household members by socioeconomic status, sex, how easy it is for households to make ends meet and time
- [SILC1B](): Household members by sex, age, financial burden of the total housing cost for the household and time
- [SILC2B](): Household members by socioeconomic status, sex, financial burden of the total housing cost for the household and time
- [SILC3P](): Household members by type of household, age, how easy it is for households to make ends meet and time
- [SILC3B](): Household members by type of household, age, financial burden of the total housing cost for the household and time
- [SILC4P](): Household members by income group, sex, how easy it is for households to make ends meet and time
- [SILC4B](): Household members by income group, sex, financial burden of the total housing cost for the household and time

8.7 Micro-data access

Researchers can get access to anonymised micro-data from well as well as data from the other countries participating in the EU-SILC. Find out more on the [Eurostat web-page]().

8.8 Other

Nothing.

8.9 Confidentiality - policy

The statistics is in compliance with Statitistics Denmarks policies on data confidentiality

8.10 Confidentiality - data treatment

Not relevant for this statistics. If a table cell consist on answers from less than 200 persons the result will not be published in the statbank, as this would result in to large statistical uncertainty.

8.11 Documentation on methodology

The SILC-Methodology is determined by Eurostat. Read more about SILC guidelines on the [Eurostat website]()

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

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