

**Documentation of statistics for  
Welfare Indicators 2015**

## 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).

## 2 Statistical presentation

The interview part of the survey collects information on the composition of the households and 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 in stead of basing analysis in the SILC-sample . The interview questions are only answered by one adult in the households. It is assumed that the answer on, say the ability to make ends meet, will be valid for all household members.

### 2.1 Data description

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

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

### 2.3 Sector coverage

Household sector - only private households

## **2.4 Statistical concepts and definitions**

Age: Age at the beginning of the survey year.

Household type: Household type.

Sex: Male/female.

Socioeconomic status: Socioeconomic status of the main breadwinner.

## **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 2005-2015

## **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.

## **2.12 Frequency of dissemination**

Yearly.

## **2.13 Legal acts and other agreements**

Law on Statistics Denmark and the EU-regulation: [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**

60 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. If it is not possible to reach the respondent by phone a paper questionnaire is send out. Afterwards the data are supplied with a lot of 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 respondents 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**

Users of the statistics published in Denmark are mainly the press.

### **4.1 User Needs**

The European Commission, researchers, ministries, etc.

### **4.2 User Satisfaction**

Is not measured 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 committee meeting, covering many different statistics.

### **4.3 Data completeness rate**

The EU regulation and the Eurostat guidelines are followed.

## **5 Accuracy and reliability**

The sample size is about 15.000 households of which about 6.000 participates. In addition to sampling errors there might be a slight risk of bias. The published indicators in the statbank is however assumed to be strongly correlated with the incomes which are calibrated to match the income for the full population. Thus the risk of bias is assumed to be small for the published indicators.

### **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 thus assumed negligible.

## 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

Non sampling error is not relevant for the data that is published in Denmark.

## 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

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'

## 6 Timeliness and punctuality

The data will be published about 1½ years after the interview.

### 6.1 Timeliness and time lag - final results

The interview is conducted in March year N and the data is published in August/September year N +1

### 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.

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 statbank.dk. Eurostat publish many figures on [Eurostat](#).

#### **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 Calendar can be accessed on our English website: [Release Calendar](#).

#### **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**

[Statbank](#).

#### **8.7 Micro-data access**

Researchers can get access to the Danish data 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 Statistics Denmark's 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 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**

The administrative placement of this statistics is in the division of Personal Finances and Welfare.  
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Statistics Denmark

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