

## 1. Domain of the statistics

*Name of the domain of the statistics* Labour Force Survey - LFS

*Contents of the time series* The time series contains information on the attachment of the population aged 16 to 64 years to the labour market.

## 2. Primary data/sources

*Danish sources* The Labour Force Survey conducted by Statistics Denmark constitutes the primary data. The LFS is a sample survey conducted on the basis of interviews of private individuals and is based on the approximately 89,000 interviews conducted annually comprising persons aged 15-74 years living in Denmark. All interviews are conducted as telephone-based interviews.

The Labour Force Survey is a quarterly sample survey comprising approximately 40,000 persons aged 15-74. The sample is divided into 13 sub-samples of equal size, one for each week in the interview quarter and the persons are interviewed with reference to one of the reference weeks. The LFS is published monthly as well as quarterly in the database, [www.statistikbanken.dk](http://www.statistikbanken.dk) while tables in the Oresund Databank are only published quarterly.

In connection with the LFS, various registers are used for constructing the sample, the raising of figures and for imputation of, e.g. demographic variables.

The following registers are used for the Labour Force Survey:  
Central Population Register (CPR)  
Population Statistics Register  
Register-based Labour Force Unemployment Statistics  
Education Classification Module  
Register-based Labour Force Statistics

*Swedish sources* The Labour Force Survey is an individually based sample survey, which is conducted monthly. The respondents give replies to questions concerning their own situation in the labour market with regard to a specific week of the reference month. The information is mainly collected via telephone-based interviews. The results from the monthly surveys are published shortly after the end of the reference period. These results form

the basis of estimating the quarterly and annual averages. The survey population in the LFS is made up by persons registered as citizens in Sweden and who are 15 years old but not yet 75 years. The survey entity is individuals.

The background variables are primarily made up by demographic variables, e.g. sex, age, marital status, children living at home with their parents, municipality/city of residence and country of birth. This information is obtained from the sample, which from the register of the total population (Registret över totalbefolkningen) is conducted for the LFS. Information is also obtained concerning the level of education completed and field of study from the register of the population's level of education completed (Registret över befolkningens utbildning).

In connection with the sample selection and raising of figures, auxiliary information is also used, which is obtained from five different sources: The register of persons seeking jobs (Arbetsökanderegister), register of employment statistics (Sysselsättningsregistret), register of the total population (Registret över totalbefolkningen), register of incomes and taxes (Registret över inkomster och taxeringer) and the longitudinal integration database for health insurance and labour market studies (Longitudinell integrationsdatabas för sjulförsäkrings- och arbetsmarknadsstudier).

*Comparability* The survey complies with the guidelines for compiling statistics on the population's attachment to the labour market as laid down by the International Labour Organisation. The labour force survey is conducted in accordance with the same guidelines in all EU Member States and in a great number of other countries, and is consequently the best Swedish and Danish survey that can be used in international comparisons of labour market statistics. Topics, reply categories, definitions, etc. are laid determined at EU level, implying that the surveys can be used for general as well as detailed comparisons of labour market conditions.

### **3. Population (statistical concepts)**

*Population in general  
– detailed explanation  
of contents*

All persons are interviewed with regard to a specific reference week. All questions concerning job, working hours, unemployment, etc. relate to this specific week. The labour market status is the main variable of the persons in the LFS.

The population is divided into two main groups, i.e. persons in the labour force and persons outside the labour force. Furthermore, persons in the labour force are further categorized into two groups: employed or unemployed (LFS-unemployed). Conscripts are considered as persons in employment.

The classification of the respondents into these groups is conducted on the basis of their labour market status in accordance with EU definitions and recommendations from the International Labour Organization (ILO).

Employed persons are all persons who in the reference week worked for payment or worked as self-employed or assisting spouses for at least one hour. People temporarily absent due to vacation, illness or maternity leave are considered to be employed.

Unemployed persons (LFS-unemployed) are all persons without employment, who have actively been looking for work in the past 4 weeks prior to the reference week and who are able to begin a job within 2 weeks after the end of the reference week. Active job search comprises contact with a job centre, applications to employers, contact with friends, relatives or trades unions or, for example, studying or answering advertisements in newspapers or journals. Looking for permits, licenses, financial resources, land, premises or equipment for potential self-employment are also considered as active job search.

Persons, who are going to start in a new job within 3 months, are also considered to be unemployed – if it is possible for these persons to start in a new job within 2 weeks after the end of the reference week.

Other persons are categorized as being outside the labour force.

*Danish population*

*Swedish population*

*Comparability* See the above-mentioned under chapter 2.

#### **4. Variables and construction**

*Common list of variables* The Labour Force Survey analyses the population's attachment to the labour market. The survey population is all persons aged 15-74 years in Denmark (in the database StatBank Denmark figures are shown for all persons aged 15-64) The Swedish Labour Force Survey also applies all persons aged 15-74 as survey population.

The surveys compile the number of persons in Denmark and in Sweden, who are employed, unemployed or outside the labour force, and the persons interviewed are also asked to answer questions concerning a wide number of conditions.

For further details see the quality declaration:

[Kvalitetsdeklaration](#)

More links to papers on the Labour Force Survey are accessible here:

[Dokumentation](#)

Further information on the Labour Force Survey in Sweden appears from:

Description of the statistics and the quality of the statistics

Description of how the statistics are produced  
List of variables and values of quantities

*Construction of variables* Classification and construction of variables comply with Commission Regulation (EC) No 377/2008.  
See codifications here:  
[AKU-undersøgelsens kodifikationer](#)

A national list of variables is used in Sweden, which in practical terms is a Swedish translation of the variables specified in the above-mentioned Commission Regulation.

*Compilation of statistics*

*Comparability* See the above-mentioned under chapter 2.

## 5. Break in the series

*Break in the series in general* The time series contains a break in the series, implying that comparability is hampered over time.

*Break in the Danish data* The Labour Force Survey has been conducted annually since 1984, and from 1994 the survey is conducted continuously throughout the year. From January 2007 the survey was expanded substantially and the collection of data was outsourced. In November 2012, a new method for the raising of figures was implemented, and data from 2007 were revised. The data series from 2007 onwards were updated on the basis of the new method of raising figures.

The expansion of the survey in 2007 (from about 40,000 annual interviews to about 89,000 interviews) was implemented with the aim of reducing the general margins of uncertainty with regard to the survey results. The panel structure was also changed from 3 to 4 panels, and the collection of data was outsourced.

The adjustment of the survey in 2007 has resulted in a minor break in the data series, which implies that detailed analyses throughout the year 2007 must be interpreted subject to caution. However, it is possible to create data series throughout 2007 at a general level. Nevertheless, there is a shifting level with regard to the level of education completed from 2006 to 2007. For further information see paper on education in the LFS at: [Notat om uddannelse i AKU](#)

The new Danish regional classification was introduced in 2007, but the changes have been revised back to the year 2000, implying that there is a time series in the Oresund Database where data are distributed by region from the year 2000 onwards.

However, the nomenclature of economic activities was broken up from the first quarter of 2009, when NACE rev. 2 was introduced. From 2000 to 2008, the nomenclature of economic activities NACE rev. 1.1 was applied

*Break in the Swedish data*

Against the background of a government decision, the Labour Force Survey was in 2005 adjusted to comply with the EU's definition of unemployed persons. Previously, the Swedish definition differed from the ILO's (International Labour Organization). On 31 May 2007 it was decided by the government in accordance with the finance act to abolish the government's decision in 1986 concerning the definition of the terms used in the Labour Force Survey.

Since October 2007, full-time students, who have looked for work and who have been able to work, were classified as unemployed in the Swedish publication. The government's decision to comply with the ILO definition and the EU adjustments in 2005, which implied, e.g. that the previous EU adjustments made to the Labour Force Survey were integrated with the general LFS, has implied that the LFS now fulfil national as well as international requirements concerning the statistics. Consequently, there is a break in the series from the second quarter 2005. For further information, please visit: [www.scb.se/aku](http://www.scb.se/aku)

On 8 June 2010, Statistics Sweden expanded the monthly sample to include 29,500 persons. In connection with the publication of statistics in June, all LFS data were revised back to January 2010. In 2012, a new project was implemented, where a new weight was developed, which gave rise to an improved balance in the two sub-samples. Against this background, all LFS data in the Oresund Database were in February 2013 revised back to January 2010.

The nomenclature of economic activities was broken from the first quarter 2009, when SNI2007 was introduced. Until 2002 the nomenclature SNI92 was used and from 2003 to 2008 the nomenclature SNI2002 was used. SNI2007 corresponds to NACE rev. 2.

## **6. Non-disclosure practice**

*Non-disclosure practice*

As the Labour Force Survey is conducted as a sample survey, the statistical uncertainty is of special importance in numerical terms with regard to small groups of persons. Against the background, published results are always rounded off to the nearest 1,000.

For further information on the guidelines concerning publication of LFS data, please see: paper on in-depth guidelines concerning the use of LFS micro data.

[Notat uddybende retningslinjer vedr. brugen af AKU-mikrodata](#)

From 2010, the variable of confidence intervals was added to the tables in the Oresund Database, for the main figures; employed persons, unem-

ployed persons, the labour force and outside the labour force. With the aim of achieving a good description of the statistical uncertainty linked to the different large or small groups in a sample-based survey, confidence intervals are frequently applied, instead of indicating the margins of uncertainty in the form of standard deviation or variance. It has been decided to apply 95 per cent confidence intervals in the Labour Force Survey. This implies that if the survey was conducted 100 times, the value indicated would in 95 cases out of 100 range within the interval, while only in 5 cases the value indicated would range outside the interval.

The statistical uncertainty is estimated as  $1.96 \times \text{standard deviation}$ , where 1.96 is equivalent to the 97.5 per cent fractile in the standardized normal distribution.

The Oresund Database also contains figures subject to uncertainty from 2010. The figures subject to uncertainty are constructed on a 95 per cent confidence interval.

In Sweden, published results are usually rounded off to the nearest 100. If it is not possible in the case of a quarterly calculation to base the calculation on at least 40 respondents, it is completely omitted.

## **7. Differences with regard to other published statistics and quality assurance**

### *Differences from other published statistics*

Data differ from that which is accessible from Statistics Denmark's database at: [www.statistikbanken.dk](http://www.statistikbanken.dk) due to the delimitation of age.

The Swedish data in the Oresund Databank do not differ from the figures that are published by Statistics Sweden. However, it is not all figures covering Skåne in the Oresund Databank that are also being published by Statistics Sweden. In certain cases, it is only the whole age group 15-74 years that is presented in Statistics Sweden's own publication. Up until 2005, the Swedish data in Orestat differ from that which is presented at: [scb.se](http://scb.se). This is due to the circumstance that values were linked by Statistics Sweden during this period – for further information, please see the description at: [www.scb.se/aku](http://www.scb.se/aku)

### *Quality assurance*

In order to ensure the quality of the data, all interviews are subject to data-editing at micro level with the main emphasis on occupational and industrial codes. In connection with the entry of data, they are subjected to checks, ensuring consistency and logic of the data.

Furthermore, the development in the main figures of the Labour Force Survey; employed and unemployed persons is compared to other statistics on employment and unemployment, which are compiled by Statistics Denmark.

The production of the Swedish LFS statistics complies with the requirements of the international standard for market, opinion and social research surveys (ISO 20252:2007).

Finally, the quality of the statistics is ensured in several ways. An example hereof is that some of the interviews conducted are subject to cross-talking for the purpose of ensuring top-quality in the work of the interviewers. Furthermore, Statistics Sweden has established a surveillance system, thereby enabling the discovery of erroneous entries in connection with the interviews conducted. Typical errors are inconsistency in the interview or logical errors, which are subsequently corrected by the interview organization. The data material is also during the phase of calculation subjected to a number of checks, ensuring that everything is working correctly. Finally, in connection with the publication of the data, they are subjected to a final quality review.

During 2013 a comprehensive analysis of the sources of error in the LFS was conducted, and the results from the analysis are expected to be published in 2014. The results show that the extent of the estimates of error in the LFS is insignificant.

## 8. Reference time

*Reference time in general* All persons are interviewed with reference to one specific reference week (Monday to Sunday). Interviews are continuously conducted throughout the year. The quarter is the reference time in the statistics, as the information is quarterly status observations.

A similar weekly reference system is applied in Sweden, which is continuously conducted throughout the year. Surveys are conducted monthly and these monthly surveys form the basis of estimating the quarterly and annual averages.

*Reference time for Danish variables*

*Reference time for Swedish variables*

*Comparability* See under chapter 2.

## 9. Intervals of updating

*Interval of updating* The time series is updated quarterly

*Publication time* Data are updated approximately 2 months after the final establishment of the background registers in the Oresund Database.

*Further information*

The calendar showing the scheduled publication of statistics is available from: <http://www.orestat.se/offentliggorelseskalender-0>.

## **10. Contact information**

*Inquiries* A contact person from, respectively, Statistics Denmark and Statistics Sweden is attached to all time series in the Oresund Database.