

# Documentation of statistics for Long Term Unemployed Persons 2017



#### 1 Introduction

This statistics show the structure and development of long-term unemployment. The statistics cover all months in the period from January 2009 onwards.

## 2 Statistical presentation

The statistics cover the persons who are long-term unemployed due to administrative data. A long-term unemployed person has been gross unemployed for at least 12 consecutive months. Persons who leave the gross unemployment for a period of 4 weeks, within the 12 months, and who is not in ordinary employment during the period of 4 weeks are also included in the statistics.

## 2.1 Data description

The statistics cover the persons who are long-term unemployed due to administrative data. The statistics is based on the International Labour Organization (ILO) definition of long-term unemployment. According to this definition a person must be unemployed for at least 12 consecutive months. Persons who leave the gross unemployment for a period of 4 weeks, within the 12 months, and who is not in ordinary employment during the period of 4 weeks is also included in the statistics.

The statistics show the number of long-term unemployed persons and the long-term unemployment rate as a proportion of the work force (16-64 years) both in actual and seasonal adjusted figures. The actual figures can be divided into municipal, gender and age-group, while the seasonal adjusted figures can be divided into part of the country, gender and age.

## 2.2 Classification system

Statistics Denmark uses Eurostat's geographical breakdown called NUTS (Nomenclature Units Territorial Statistique). Click <a href="here">here</a> for more information on NUTS.

### 2.3 Sector coverage

Not relevant.



## 2.4 Statistical concepts and definitions

**Gross unemployment**: Gross unemployment contains persons who receive unemployment benefits and persons who receive cash benefits and are ready to work.

**Member of an unemployment fund**: Member of a Danish unemployment fund exclusive recipients of early retirement.

**Social assistance etc.**: Consists of the benefits social assistance, education allowance and integration benefits.

**Long-term unemployment**: The statistics include persons who are gross unemployed and meet the ILO definition of long-term unemployment. According to this definition a person should be unemployed for at least 52 consecutive weeks (1 year). Furthermore, persons who temporary leave the gross unemployment statistics are included in the concept of long-term unemployment. A temporary period of absence has a maximum duration of 28 days and the person may not at the same time have more than 10 hours of employment.

**Unemployment spells**: The concept covers all durations of unemployment spells. This statistics covers durations of unemployment spells of minimum 26 weeks (0,5 year), 39 weeks (0,75 year), 52 weeks (1 year), 78 weeks (1,5 years), 104 weeks (2 years), 130 weeks (2,5 years) and 156 weeks (3 years).

#### 2.5 Statistical unit

The unit in the long-term unemployment statistics is number of persons.

## 2.6 Statistical population

The official long term unemployment covers a population of persons who has been gross unemployed for at least 52 weeks (≈1 year) on the basis of administrative data. The statistics also covers longer and shorter durations of unemployment spells. The population in these figures varies from gross unemployment spells in minimum 26, 39, 52, 78, 104, 130 and 156 weeks.

## 2.7 Reference area

The statistic covers all long-term unemployed persons in Denmark.

#### 2.8 Time coverage

The statistic covers the period from January 2009 onwards.

## 2.9 Base period

Not relevant for this statistic.

#### 2.10 Unit of measure

The unit of measurement is persons. But is also given in percent of the labour force.



## 2.11 Reference period

The long term unemployment is based on unemployment periods from the last year. The long term unemployment figures from the last three months has the following periods of reference:

Month of reference March 2017 has the period of reference: 01-04-2016 to 31-03-2017

Month of reference April 2017 has the period of reference: 01-05-2016 to 30-04-2017

Month of reference May 2017 has the period of reference: 01-06-2016 to 31-05-2017

## 2.12 Frequency of dissemination

The statistics is published quarterly and cover the last three months.

## 2.13 Legal acts and other agreements

The long-term unemployment is based on the Register of Public Benefits and the Register of Employees. The legal basis to collect data in these two registers can be found in the Act on Statistics Denmark § 6 (Lov om Danmarks Statistik § 6).

There are no legal basis in the EU-law.

#### 2.14 Cost and burden

The statistics is register-based why there is no direct burden of reporting. Data regarding the Register of Public Benefits is collected by the Ministry of Employment. The employment records are based on income information reported to the Income Register of the Danish Tax Authorities (eIncome).

#### 2.15 Comment

For further information contact Statistics Denmark.

## 3 Statistical processing

The statistics of long-term unemployment is made out of the register of public benefits that covers all persons receiving public benefits in the age of 16-64 years from 2007 onwards. The Register of Employees is also used in the statistics. The employment records cover employed persons in firms registered in Denmark from January 2008 onwards.

Both data regarding public benefits and employment is collected quarterly.

The data is processed on the basis of the definition of long term unemployment.



#### 3.1 Source data

The statistics of long-term unemployment is made out of the register of public benefits, which covers all persons receiving public benefits in the age of 16-64 years from 2007 onwards. Furthermore the register of employees is used, which covers employed persons in firms registered in Denmark from January 2008 onwards.

## 3.2 Frequency of data collection

Data for the registers of persons receiving public benefits and employment records are collected every quarter.

#### 3.3 Data collection

The gross unemployment is made of data from the Register FLEUR. The Danish Agency for Labour Market and Recruitment is responsible for the data-collection. The source of the Employment statistics is the eIncome Register of Statistics Denmark combined with data from the Business Register and the Population Register of Statistics Denmark. The eIncome Register of Statistics Denmark is based on income information reported to the Income Register of the Danish Tax Authorities (eIncome).

#### 3.4 Data validation

To validate data the level and development of the statistics are compared with the register based unemployment statistics. Furthermore, the statistics is recreated for the last three month on the updated dataset to see if there have been any large revisions.

#### 3.5 Data compilation

The data is processed with Statistical Analysis Software (SAS) programmed according to the definition of long-term unemployment. The statistics include persons who are gross unemployed and meet the ILO definition of long-term unemployment. According to this definition a person should be unemployed for at least 12 consecutive months. Furthermore, the persons who temporary leave the gross unemployment statistics are included in the concept of long-term unemployment. A temporary period of leave has a maximum duration of 28 days.

## 3.6 Adjustment

Beyond seasonal adjustment the statistics is not adjusted. Further description about the seasonal adjustment can be found below in the section "Seasonal Adjustment".

#### 4 Relevance

Users: Ministries (primary the Ministry of Employment), municipalities, organizations, educational institutions, research institutions, the news media and private persons.

The statistics is quite new and there has not been collected any knowledge about the user experience.



#### 4.1 User Needs

Users: Ministries (primary the Ministry of Employment), municipalities, organizations, educational institutions, research institutions, the news media and private persons.

#### 4.2 User Satisfaction

The statistics was published for the first time in 2014. There has not been collected any knowledge about the user experience.

### 4.3 Data completeness rate

Not relevant for this statistics.

## 5 Accuracy and reliability

The statistics measure the number of long-term unemployed persons according to administrative registers and is based on a full sample. The statistics is precise according to the written description of long-term unemployment.

## 5.1 Overall accuracy

The statistics is precise according to the written description of long-term unemployment and is based on a full sample.

## 5.2 Sampling error

The sample error is zero as it is a full sample.

## 5.3 Non-sampling error

Data on gross unemployment retrieved quarterly from the register Public benefits, has the following uncertainties: the number of recipients of unemployment benefits typically has a lack of 1 per cent when it is published quarterly.

Data on the Employment statistics has the following uncertainties: The uncertainty in the development of the number of employees is estimated to be less than 1 per cent of the total number of full-time employees, where 1 per cent corresponds to approx. 20,000 full-time employees. As regards more detailed statistics in terms of industry and geographical distribution the uncertainty is much greater. Quality studies have so far only been carried out to a very limited extent. Some reports to eIncome lack information on hours paid or the reported information has been found to be invalid. Therefore imputed (estimated) paid hours of work for these reports.



### 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 number of long-term unemployed is made out of two different statistics; the unemployment statistic and the employment statistic. These registers are not mutual coordinated on a person level, which may have some effect on the quality of the statistic. Furthermore the statistics measures persons that are long-term unemployed according to administrative benefits IT-systems. Firstly, this means that the quality of the information gathered in the IT-systems is considered to be high. But secondly, this means that the statistics is affected by labour market reforms concerning the benefits. An example is the Unemployment benefits reform from July 2010 where a shorter benefits period of 2 years was implemented (the old maximum benefits period was 4 years).

For more information on the registered unemployment see the documentation Registered <u>Unemployment</u>.

For more information on the employment statistics see the documentation **Quarterly Employees**.

## 5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

## 5.8 Data revision practice

On July the 1st 2017 a new unemployment benefits system was introduced. In relation to this statistics this meant that the months of reference changed periods. Before the periods followed the unemployment benefits months, and now it follows a regular calendar month. This change has been implemented in the whole series from January 2009 to present. The revision has meant a slight change in the levels of the number of long-term unemployed. For more information, see the section below.



## 6 Timeliness and punctuality

The statistic is published quarterly and is published 4.5 month after the end of the reference period.

## 6.1 Timeliness and time lag - final results

4.5 month for final figures. No provisional numbers.

### 6.2 Punctuality

The punctuality is high.

## 7 Comparability

The statistic is comparable from one month to another from January 2009 onwards. For international comparison the Labour Force Survey is recommended.

## 7.1 Comparability - geographical

For international comparison the Labour Force Survey (LFS) is recommended. LFS is a survey based statistics. AKU-long-term unemployment is defined as unemployment for 12 consecutive months. In general, the level of AKU-long-term unemployed persons is on a higher level than in the register based long-term unemployment. This is because the LFS includes students and individuals who does not receive any benefits but still can be defined as LFS-unemployed.

#### 7.2 Comparability over time

The long-term unemployment is comparable since January 2009.

#### 7.3 Coherence - cross domain

The long-term unemployment statistics from Statistics Denmark varies from the way other organizations define long-term unemployment. E.g. the Danish Agency for Labour Market and Recruitment has a definition where a person is long-term unemployed when he/she has been gross unemployed for 80 percent of the last 12 month, and the person must be gross unemployed for the last week of the reference period. Other organizations have related definitions.

## 7.4 Coherence - internal

The register of Public Benefits has a high degree of internal consistency as the benefits included in the registry are controlled for internal overlap. This means that a person cannot be registered with two different benefits at the same time. No studies have been made of the consistency between the register of Public Benefits and the register of Employees. If the information from the two registers is inconsistence, the unemployment data from the register Public Benefits is used over Employment data.



## 8 Accessibility and clarity

All figures are available at StatBank Denmark.

#### 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

Not available.

#### 8.5 Publications

Not relevant for this statistic.

### 8.6 On-line database

The long-term unemployment tables are published on the website http://www.statbank.dk under the subject:

- 1: Labour, income and wealth
- 2: Unemployment
- 3: Registered unemployment

AULKo4: Long term unemployed persons by region, type, age and sex

AULKo5: Long term unemployed persons by sex and age, seasonal adjustment.

AULKo6: Long term unemployed persons by region and seasonal adjustment.

Direct link to the tables; StatBank Denmark.

#### 8.7 Micro-data access

Not available for this statistic.



#### 8.8 Other

No other access.

## 8.9 Confidentiality - policy

See Statistics Denmark <u>Data Confidentiality Policy</u> for more information about discretion policy.

## 8.10 Confidentiality - data treatment

No special effort is made due to the discretion issue.

## 8.11 Documentation on methodology

No other accessible documentation.

## 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 Labour Market. The person responsible is Anders Eeg, tel. +45 39 17 30 49, mail: aeg@dst.dk

### 9.1 Contact organisation

Statistics Denmark

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Labour Market, Social Statistics

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