STATISTICS DENMARK

Documentation of statistics for
Registered unemployment 2022

1 Introduction

The purpose is to produce statistics monitoring the structure and trends in the unemployed population and the causes of unemployment. The statistics are compiled on the basis of registers. The statistics on the registered number of net unemployed have been compiled by Statistics Denmark since 1979. As from the publication of unemployment statistics for January 2010, attention is now focused on the gross unemployed population, defined as the sum of the registered (net-) unemployed population and persons in activation programmes and who are, at the same time, considered to be available for work. The figures on gross unemployment are calculated from January 2007 and onwards. From the 12. of October 2022 and onwards the gross unemployment statistics will be expanded with a monthly unemployment indicator published 10-12 days after the end of the reference month.

2 Statistical presentation

The register based unemployment statistics (gross- and net-unemployed) provide monthly data on the unemployed population registered with the unemployment insurance funds and with the public job centres. The statistics comprise all unemployed persons insured against unemployment and non-insured persons who are available for work and at the same time claiming cash benefits under the Danish Social Assistance Act. The statistics are shown by municipality, sex, age group, type of benefit, unemployment insurance funds, country of origin and level of education.

2.1 Data description

The register based unemployment statistics (gross- and net-unemployed) provide data on the unemployed population registered with the unemployment insurance funds and with the public job centres. The statistics comprise all unemployed persons insured against unemployment and non-insured persons available for work and at the same time claiming cash benefits under the Danish Social Assistance Act. As from January 2010, gross registered unemployment figures are also published, defined as the sum of the registered (net-) unemployed population and persons in activation programmes and who are, at the same time, considered to be available for work. The statistics cover both the actual number of unemployed and the seasonally adjusted number of unemployed full-time persons as well as the unemployment rates in relation to the labour force and in relation to the number of insured unemployed persons registered with the unemployment insurance funds. The statistics are shown by municipality, sex, age group, type of benefit, unemployment insurance funds, country of origin and level of education.

The purpose is to produce statistics monitoring the structure and trends in the unemployed population and the causes of unemployment. The statistics are compiled on the basis of registers. The data sources of the statistics are: The Register for Insured unemployment and early retirement pay (FLEUR) and direct data reports from the municipalities/STAR concerning the match/visitation category and the scope of activation of recipients claiming social assistance. The statistics on the registered number of net unemployed have been compiled by Statistics Denmark since 1979.

From July 2017 the data source for the recipients of unemployment benefit is changed from RAM to FLEUR. At the same time the reference periods for the unemployment statistics is changed from 'unemployment benefit periods' to 'calendar months'.

From the 12. of October 2022 and onwards the gross unemployment statistics will be expanded with a monthly unemployment indicator published 10-12 days after the end of the reference month.

2.2 Classification system

The register based unemployment statistics is published by 'province'/'landsdele', which is a special Statistics Denmark classification, see Province.

Furthermore the register based unemployment statistics is published by 'type of benefits', with the following four parts: Net unemployed recipients of unemployment benefit, Net unemployed recipients of social assistance, Activated persons on unemployment benefit and finally Activated persons on social assistance.

2.3 Sector coverage

The statistics covers all sectors.

2.4 Statistical concepts and definitions

Full-time unemployed: The concept 'Full-time unemployed' is calculated as the sum of all the hours/parts the unemployed persons are registered as unemployed.

2.5 Statistical unit

The register based unemployment statistics is mainly published in the unit 'Full-time unemployed', see the description under the item 'Concepts and definitions'.

2.6 Statistical population

The purpose is to measure the total unemployment for persons aged 16-66 years old and resident in Denmark. This gross unemployment statistics is register based which means that the sources of the statistics includes all registered unemployed persons in Denmark. This population consists of all unemployment benefit recipients together with those recipients of cash benefit who are considered to be available for work.

2.7 Reference area

Denmark.

2.8 Time coverage

The monthly gross unemployment is published from January 2007 and onwards. The detailed monthly net unemployment is published from May 2000. The overall yearly net unemployment is published from 1979.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

The unit of measurement for this statistics is 'Full-time recipients'. This unit of measurement is calculated as the sum of each individual persons hours/volume-parts in where they are receiving public benefits as unemployed.

2.11 Reference period

The statistics are compiled monthly, quarterly and annually.

2.12 Frequency of dissemination

The statistics are published monthly.

2.13 Legal acts and other agreements

The Act on Statistics Denmark, section 6, as amended by Act no 15 of January, 12, 1972, by Act no 386 of June, 13, 1990 by Act no. 1025 of December, 19, 1992, by Act no. 599 of 22 June 2000 and most recently by Act no 431 of 6 June 2005).

The register based unemployment statistics is not covered by any EU regulation.

2.14 Cost and burden

No response burden (caused by Statistics Denmark), because the statistics is based on administrative registers.

2.15 Comment

As a reaction to COVID-19 the Danish Labour Market Authority (STAR) from the 12th of March 2020 to the 26th of May 2020, has suspended all the duties concerning job seeking and availability for the labour market for the recipients of benefits. Nevertheless the recipients of unemployment benefit and cash benefit are still considered to be gross unemployed from the 12th of March 2020 to the 26th of May 2020.

Supplementary documentation is available on [Documentation of the unemployment statistics from Statistics Denmark](#).

3 Statistical processing

All the data is collected from administrative registers. After receiving the data we make a data validation and a harmonization before entering the data into our oracle-database for further data processing, including an elimination of illegal 'overlapping' data. From the 12. of October 2022 and onwards we receive early register based information from the Danish labour market authority (STAR) to estimate an early unemployment indicator figure 10 to 12 days after the end of the reference month.

3.1 Source data

The unemployment statistics are compiled on the basis of the files of the Historical register of Insurance fund members (HAMR) maintained by the National Labour Market Authority, (STAR) and the Register for insured unemployment and early retirement pay (FLEUR) also maintained by STAR and direct data reports from the municipalities/STAR concerning the match/visitation-category and the scope of activation of recipients claiming social assistance. Information about unemployment benefit claimants is reported by the unemployment insurance funds, while information about persons receiving cash benefits under the Danish Social Assistance Act, is transmitted by the job centers.

3.2 Frequency of data collection

The data is collected on a monthly basis.

3.3 Data collection

All the data is collected from administrative registers.

3.4 Data validation

In the first place we check that the data files have the expected dates, format and size. After loading the data into the database we check the level and dynamic towards the corresponding data from the last months and the same months last year.

3.5 Data compilation

All the data is collected from administrative registers. After receiving the data we make a data validation and a harmonization before entering the data into our PSD-database for further data processing, including an elimination of illegal 'overlapping' data.

3.6 Adjustment

The actual reported unemployment figures are enumerated each month before the seasonal adjustment of the figures. The enumeration is calculated in the light of the actual observed lack of observations over the past.

4 Relevance
- Users: Municipalities, regions, ministries, job centers, organizations, international organizations, the media, private business enterprises, and private individuals.
- Fields of application: Public and private structural analyses and trade cycle surveys, educational purposes and public debate.

There has not been any actual 'satisfaction-examination' carried out, but the general use of the statistics, for instance by the media, has always been considerable.

4.1 User Needs
- Users: Municipalities, regions, ministries, job centers, organizations, international organizations, the media, private business enterprises, and private individuals.
- Fields of application: Public and private structural analyses and trade cycle surveys, educational purposes and public debate.

4.2 User Satisfaction

There has not been any actual 'satisfaction-examination' carried out, but the general use of the statistics, for instance by the media, has always been considerable.

4.3 Data completeness rate

When the statistics is register based it is in the principle a complete data collection from the first release. In practice the current statistics is underestimated by 2-3 per cent for the last months data. The statistics is not attached to any regulations/guidelines on completeness.

5 Accuracy and reliability

The statistics comprise all unemployed persons above 16 and until they reach their official retirement age. Only persons registered as recipients of unemployment benefits or social assistance/initial assistance are covered by the statistics. Persons who do not recieve social assistance or unemployment benefits are thus excluded from the statistics on unemployment, although they are registered with the public job centres. It is impossible to give a single figure on the statistical accuracy, but apart from the circumstance that a person must receive unemployment benefits or social assistance in order to be registered as unemployed, the accuracy of the statistics is relatively high.

From the 12. of October 2022 and onwards the gross unemployment statistics will be expanded with a monthly unemployment indicator published 10-12 days after the end of the reference month. In a test period of 11 months the new indicator has estimated the following official gross unemployment total within 1.000 unemployed persons.

5.1 Overall accuracy

It is not possible to give an exact number of 'the uncertainty'. The data quality in the HAMR, FLEUR and CPR registers is generally very high. The statistics on the registered number of unemployed persons are also, to the greatest possible extent, compiled in accordance with the guidelines laid down by UN's International Labour Office (ILO). According to these guidelines a person has to meet 3 requirements to be defined as unemployed: 1) out of work, 2) available for work and 3) actively in search of work.

The concepts of unemployment in register based unemployment statistics do not strictly meet ILO's guidelines. The most important differences are:

1. That unemployed students or pensioners are not registered as unemployed, due to the circumstance that they do not receive unemployment benefits or cash benefits.
2. That the registered unemployment is calculated as the unemployed population's total unemployment volume (converted into full-time unemployed persons), i.e. including unemployment for part-time persons during the week, whereas ILO's guidelines prescribe that the statistics are to be compiled on the basis of fully unemployed persons

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

As the statistics is register based there is no uncertainty connected to the sample. In return the monthly statistics is known to be underestimated with 2-3 per cent. To be considered as registered unemployed you have to be recipient of either unemployment benefit or cash benefit or a similar benefit. Beside this delimitation the register based unemployment is very much in line with the international ILO-definition of unemployment.

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 statistics is register based. To be considered as registered unemployed you have to be recipient of either unemployment benefit or cash benefit or a similar benefit. Beside this delimitation the register based unemployment is very much in line with the international ILO-definition of unemployment.

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

Every time new actual monthly figures for full-time unemployment are published the seasonally adjusted figures are adjusted backwards in time. The most recently adjusted seasonal figures are always available from StatBank Denmark. This also implies that the seasonally adjusted figures appearing in the publications will always be preliminary figures. The overall adjustment from "preliminary" to final seasonal figures is generally less than 1,000 unemployed full-time persons, or about 1 pct. The largest adjustments are seen for the latest 2-3 months and for the corresponding months of the previous year. Before the seasonal adjustments take place, the actual monthly figures are adjusted upwards as the result of deficiencies due to the late submission of unemployment benefit cards. The upward adjustment corresponds to about 3 pct. for the latest month, and is conducted in order to achieve greater consistency between the average of the 12 seasonally adjusted monthly figures and the actual updated annual average. Adjustments are made in accordance with the expected percentage for the last 2 months until the annual percentage can be finally compiled. The final updating of the actual monthly figures is conducted after 6 months, and subsequently they are regarded as final and are available from the database StatBank Denmark. As from January 2011, the grossed-up actual unemployment figures are also available from StatBank Denmark. The definition of this time series is that the final actual unemployment figures are combined (they are all at least 6 months old) with the grossed-up provisional actual unemployment figures for the most recent months.

6 Timeliness and punctuality

The monthly statistics is published roughly 30 days after the end of the reference month and the yearly statistics is published roughly 100 days after the end of the reference year. These official release dates are always published a year ahead.

6.1 Timeliness and time lag - final results

The statistics appear monthly in 'Nyt fra Danmarks Statistik' (News from Statistics Denmark), typically the last Thursday of the subsequent calendar, corresponding to a "delay" of about 1 month in relation to the reference month. The monthly unemployment figures are available from the database StatBank Denmark at 8:00 a.m. on the same day as News from Statistics Denmark is published. Quarterly and annual figures on unemployment are also available from StatBank Denmark. The quarterly statistics is published roughly 80 days after the end of the reference quarter and the yearly statistics is published roughly 100 days after the end of the reference year.

6.2 Punctuality

An annual schedule is prepared (at the latest) in October for the next year's publications of unemployment statistics. The scheduled publication dates are usually observed.

7 Comparability

The statistics on the registered number of net unemployed have been compiled by Statistics Denmark since 1979. To avoid a great number of discontinuities of the data series, the statistics have roughly speaking remained unchanged since 1979. However, the unemployment statistics have been adjusted as from the publication of unemployment figures for January 2008. The underlying primary data have been edited and changes have been made to the concept of unemployment, which imply that the Danish concept of net unemployment is now closer to the definition of unemployment applied by the International Labour Office, ILO, see item 3.1. All changes have been made back to April 2000. As from the publication of unemployment statistics for January 2010, attention is now also focused on the gross unemployed population, defined as the sum of the registered (net-) unemployed population and persons in activation programmes and who are, at the same time, considered to be available for work. The figures on gross unemployment are calculated from January 2007 and onwards. When the register based unemployment statistics depends on a number of national administrative registers it is not a good statistics for international comparisons. For international comparisons of unemployment you ought to use the unemployment figures from the labour force surveys in the different countries instead.

7.1 Comparability - geographical

When the register based unemployment statistics depends on a number of national administrative registers it is not a good statistics for international comparisons. For international comparisons of unemployment you ought to use the unemployment figures from the labour force surveys in the different countries instead.

7.2 Comparability over time

A few main series go back to 1910, see the publication Labour Market 1996:28 (Statistical News). However, there have been several discontinuities of the data series, e.g. the statistics until 1973 only covered the population insured against unemployment, but since then the statistics now cover all persons who are unemployed.

From 1979 up to and including 2007, the statistics are strictly comparable. However, changes to the unemployment insurance funds have an effect on the data series at the level of unemployment insurance funds. To this is added that since 1 September 2002, all unemployment insurance funds have been able to decide whether they want to be interdisciplinary or professionally defined.

The statistics on the registered number of net unemployed have been compiled by Statistics Denmark since 1979. To avoid a great number of discontinuities of the data series, the statistics have roughly speaking remained unchanged since 1979. However, the unemployment statistics have been adjusted as from the publication of unemployment figures for January 2008. The underlying primary data have been edited and changes have been made to the concept of unemployment, which imply that the Danish concept of net unemployment is now closer to the definition of unemployment applied by the International Labour Office, ILO, see item 3.1. All changes have been made back to April 2000.

As from the publication of unemployment statistics for January 2010, attention is now also focused on the gross unemployed population, defined as the sum of the registered (net-) unemployed population and persons in activation programmes and who are, at the same time, considered to be available for work. The figures on gross unemployment are calculated from January 2007 and onwards.

As from the publication of unemployment statistics for July 2017 the data source concerning the recipients of unemployment benefit was changed from RAM to FLEUR. One consequence of this change is that the reference period of the monthly unemployment statistics changed from unemployment benefit periods (4 or 5 whole weeks) to real calendar months.

7.3 Coherence - cross domain

Statistics Denmark's Labour Force Survey conducted on the basis of samples and interviews contains quarterly unemployment figures, which are compiled in accordance with common EU rules laid down by the ILO. The above surveys are conducted by each EU member state in accordance with EU regulations and enable comparisons of unemployment figures among the member states. In Denmark, the sample survey consists of about 18,000 persons each quarter. The reference period in the labour force surveys is the interview-week implying that the surveys are restricted to cover only those persons who were fully unemployed during the interview-week (unlike the register-based unemployment statistics). Furthermore, the Labour Force Surveys set out precise criteria/questions to which the persons must provide an affirmative reply in order to be categorized as unemployed in accordance with the ILO definition. The Labour Force Surveys also cover a group of unemployed persons, who are excluded from the register-based unemployment statistics, as they do not receive social assistance benefits, initial assistance, unemployment benefits or a similar benefit. The difference between the two unemployment concepts has previously (in 1990's) implied that the number of unemployed persons in the Labour Force Survey has been lower than the corresponding level in the register-based unemployment statistics. However after the year 2000 the level for unemployment in each of the two statistics has been closer to each other, which must partly be attributed to the tightenings made among the respondents for the register based unemployment statistics, with respect to when the recipients of cash benefits can be regarded as unemployed in accordance with the ILO definition. As from 2007, the sample for the Labour Force Surveys has been doubled, which has implied that the level of unemployment according to the Labour Force Surveys is above the level in the register-based unemployment statistics, while developments, i.e. falls and increases from 2007 to 2014, are largely identical. As from the fall 2013 Statistics Denmark has published (together with the monthly register based unemployment statistics) monthly unemployment estimates based on the labour force survey.

7.4 Coherence - internal

No internal consistency problems in the register based unemployment statistics.

8 Accessibility and clarity

Monthly publications: Nyt fra Danmarks Statistik (News from Statistics Denmark) and Statistikbanken (Stat bank Denmark). Quarterly publications: Statistikbanken (Stat bank Denmark). Annual publications: Statistisk Tiårsoversigt (Statistical Ten-Year Review), Arbejdsmarked (Labour market) appearing in the series Statistiske Efterretninger (Statistical News) and Statistikbanken (Stat bank Denmark). From the 12. of October 2022 and onwards the gross unemployment statistics will be expanded with a monthly unemployment indicator published in Nyt fra Danmarks Statistik (News from Statistics Denmark) 10-12 days after the end of the reference month.

You find more information on: Unemployment.

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

You find more information on: Unemployment.

8.5 Publications

Documentation/publication of unemployment statistics

8.6 On-line database

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

- AUS08: unemployed persons (seasonally adjusted) by region, seasonal adjustment and actual figures and time
- AUS07: Unemployed persons (seasonally adjusted) by benefits, sex and age, seasonal adjustment and actual figures and time
- AUF02: Unemployed persons by region, type of benefits, unemployment insurance fund, age, sex and time
- AUP02: Unemployed in per cent of the labour force by region, age, sex and time
- AUS05: Social benefit (not prepared for employment) and hollyday allowance by type of benefits, seasonal adjustment and time
- AUA01: Insured persons by region, unemployment insurance fund, age, sex and time
- AULAAR: Net unemployed by sex, persons/pct. and time
- AULK01: Full-time unemployed persons by region, type of benefits, unemployment insurance fund, age, sex and time
- AULK02: Full-time uenmployed persons/uemployed persons by type, type of benefits, age, sex, degree of unemployment and time
- AULKP01: Full-time unemployed persons in per cent of the labour force by region, age, sex and time
- AUL02: Full-time unemployed persons/unemployed persons by type, type of benefits, age, sex, degree of unemployment and time
- AUL01: Full-time unemployed persons by region, type of benefits, unemployment insurance fund, age, sex and time
- AULP01: Full-time unemployed persons in per cent of the labour force by region, age, sex and time
- AUL08: Net full-time unemployed persons by region, persons/pct., highest education completed, age, sex and time
- AULK03: Full-time unemployed persons by region, country of origin, sex and time
- AUL03: Full-time unemployed persons by region, country of origin, sex and time
- AULP03: Full-time unemployed persons in per cent of the labour force by region, country of origin, sex and time
- RASIE11: Labour force to calculate unemployment rates (ultimo november) by ancestry, country of origin, age, sex and time
- RASIE22: Labour force to calculate unemployment rates (ultimo november) by ancestry, country of origin, region and time
- AUF01: Unemployed persons (provisional) by region, type of benefits, unemployment insurance fund, age, sex and time
- AUP01: Unemployment in per cent of the labour force (provisional) by region, age, sex and time
- AUP03: Unemployed insured persons (provisional) by region, age, sex, unemployment insurance fund and time
- LIGEAI9A: Gender equality indicator of full-time unemployed persons by indicator, age, region and time
- LIGEAB9A: Full-time unemployed persons by type of benefits, region, sex, age and time
- LIGEAI9B: Gender equality indicator of full-time unemployed persons (seasonally adjusted) by indicator and time
- LIGEAB9B: Full-time unemployed persons (seasonally adjusted) by sex and time

8.7 Micro-data access

Annual statistics at the level of CPR are stored electronically as from 1985. The corresponding monthly statistics are available from 1996. For the existing statistics, the new unemployment statistics are compiled backwards to April 2000. With the adjustment of the statistics (at the beginning of 2008), it is now easier to conducted longitudinal analyses at the level of individuals, e.g. analyses of the impact of each individual activation measure. These longitudinal data is available from January 2007 and onwards and consists of the following variables: Personal identification, type of unemployment, start- and end date, hours in unemployment per week and a 0/1-variable indicating if the person is considered to be gross unemployed or not.

8.8 Other

The total amount of data laying behind the register based unemployment statistics is a splendid readiness for a lot of custom-made services. These services are typical delivered by custom-made tables and settled with an amount of money corresponding to the time spend on providing the demand figures/tables.

8.9 Confidentiality - policy

When the register based unemployment statistics is calculated as a number of fulltime-unemployed there is not a lot of problems concerning discretion matters. See also Statistics Denmarks general rules of discretion on general politic.

8.10 Confidentiality - data treatment

When the register based unemployment statistics is calculated as a number of fulltime-unemployed there is not a lot of problems concerning discretion matters. See also Statistics Denmarks general rules of discretion on general politic.

8.11 Documentation on methodology

The primary data and contents of the statistics are described in the present declaration of contents. For further information see Unemployment.

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 and Income. The person responsible is Mikkel Zimmermann, tel. + 45 51 44 98 37, e-mail: mzi@dst.dk

9.1 Contact organisation

Statistics Denmark

Statistics Denmark
Sejrøgade 11
DK 2100 København Ø

9.2 Contact organisation unit

Labour and Income, Social Statistics

9.3 Contact name

Mikkel Zimmermann

9.4 Contact person function

Responsible for the statistics

9.5 Contact mail address

Sejrøgade 11, 2100 Copenhagen

9.6 Contact email address

mzi@dst.dk

9.7 Contact phone number

+45 51 44 98 37

9.8 Contact fax number

N/A