

Documentation of statistics for Employment in Businesses 2012



1 Introduction

The purpose of the Employment in Businesses (EiB) statistic is to analyze the number of establishments and their employment at the end of November by industries and regions.

The statistic has been compiled since 1990. It replaced the register based workplace statistic, which had been compiled for the period 1980-1989.

2 Statistical presentation

The Employment in Businesses (EiB) statistic is published annually. The EiB provides information about the number of establishments and the number of jobs at the end of November plus figures for employment in full-time equivalents and annual wages.

The jobs can be filled by self-employed persons, assisting spouses or employees.

The statistic can be distributed on municipalities, industries and size of the work place.

2.1 Data description

The EiB statistic is published annually. It provides information about the number of establishments and the number of jobs at the end of November plus figures for employment in full-time equivalents and annual wages.

The establishments covered by the EiB are all workplaces connected with real active enterprises and with employment (jobs) at the end of November according to the information recorded in the central business register.

The jobs can be filled by self-employed persons, working spouses or employees.

Data is distributed by municipalities, industries and the size of the establishments.

The statistic is published in Nyt fra Danmarks Statistik (News form Statistics Denmark), Statbank Denmark and Statistical Yearbook.

2.2 Classification system

The statistic follows the Danish Industrial Classification of all Economic Activities 2007. A description of the classification is available here.

2.3 Sector coverage

The statistics include all sectors.



2.4 Statistical concepts and definitions

Establishment: An establishment is defined as an organizational unit of an enterprise, which is located at a specific address. The EiB comprises all establishments with jobs at the end of November. Only workplaces linked to real active companies are included in the EiB.

Full-time employees: The number of employees in full-time equivalents at the workplace during the year. The number of employees in full-time equivalents is calculated by setting the hours paid in proportion to the maximum number of hours of paid work during the year with a weekly employment of 37 hours (1,924 hours). A job cannot exceed one full-time employee.

Job: The number of jobs corresponds to all jobs at each establishment at the end of November, where the persons in the jobs are resident in Denmark 1st of January the year after.

Payroll: Compensation for employees include A-income from which labour market contribution are paid. Compensation of employees also include ATP-contributions (Danish Labour Market Supplementary Pension Scheme) and the taxable value of fringe benefits. Also included are the total actual contributions to pension schemes from the Central Pensions System operated by the Danish tax authorities. Reimbursement of maternity and sickness benefits for the employer are not part of compensation of employees.

2.5 Statistical unit

The statistical unit is establishments.

The establishments covered by the EiB statistic are all workplaces connected with real active enterprises according to the information recorded in the central business register, where there can be referred jobs to at the end of November.

2.6 Statistical population

The population in the EiB comprises all establishments with jobs at the end of November. Only workplaces linked to real active companies are included in the EiB.

2.7 Reference area

Denmark and few register technical units in the group "Outside Denmark" (mainly sailors on long voyages).

2.8 Time coverage

The statistic has been published since 1990, but with data breaks during this period (see the section "Comparability over time").

With the present method the statistic covers the period 2008 and forward.

2.9 Base period

Not relevant for these statistics.



2.10 Unit of measure

Establishments.

2.11 Reference period

Establishments and jobs: The last working day at the end of November.

Full-time employees and wages: The calendar year.

2.12 Frequency of dissemination

The statistic is published on a yearly basis.

2.13 Legal acts and other agreements

§6 in Law about Statistics Denmark (Lov om Danmarks Statistik). The main input of the EiB is the e-income register, which is collected by the tax authorities and delivered to Statistics Denmark.

2.14 Cost and burden

There is no directly reporting burden associated with the statistic.

2.15 Comment

You can read more about the EiB <u>here</u>.

3 Statistical processing

During the production of the register-based labour force statistic (RAS statistic) a common basic register for RAS and EiB is produced. This basis register is generated on the basis of the e-income register and a number of other registers. The EiB statistical register is produced from this basic register.

3.1 Source data

The data source are various registers among others the e-income register, the central business register, the register with information about persons receiving public benefits and the population register.

3.2 Frequency of data collection

The EiB is an yearly statistic.



3.3 Data collection

The data collection consists of collecting data from public authorities' registers.

During the production of the register-based labour force statistic (RAS statistic) a common basic register for RAS and EiB is produced. The EiB statistical register is produced from this basic register.

3.4 Data validation

Employers with more than one activity unit (workplace) are obliged to report the activity unit of which the employee is linked. However, there are many employers (especially in the public sector), where reports are deficient. On the basis of the Statistics Denmark's business register the reported workplace is debugged and a statistical unit for the workplace of the job is imputed.

Persons, who are full-time unemployed at the reference time, cannot at the same time have a job in the EiB. These jobs are not included in the EiB.

3.5 Data compilation

When the EiB statistical register is produced it is checked that all active establishments at the end of November have a valid municipality code and as many as possible have a valid industry code.

3.6 Adjustment

No correction of data is made beyond what has already been described in "Data validation" and "Data processing."

4 Relevance

The statistic is used in planning etc., but has relatively little attention in the media in connection with the annual publication.

4.1 User Needs

- Users: Municipalities, regions, ministries, organisations, private firms and private individuals.
- Applications: Public and private planning, research etc.

4.2 User Satisfaction

The statistic has relatively little attention in the media in connection with the annual publication.

There has been no request for changes in the statistic or expressed dissatisfaction with the statistic.

4.3 Data completeness rate

All data are published.



5 Accuracy and reliability

The main input for the EiB is the e-income register and therefore the accuracy and reliability of the EiB dependent on the quality of this register. The e-income register is in general considered to be of high quality.

The EiB have been produced for five years with the current data input and Statistics Denmark have gained experience in correcting the data. Against this background the EiB is considered to have a reasonable high quality.

5.1 Overall accuracy

The EiB have been produced for five years with the current data input and Statistics Denmark have gained experience in correcting the data. Against this background the EiB is considered to have a reasonable high quality.

5.2 Sampling error

Not relevant because the statistic is based on a census.

5.3 Non-sampling error

There is uncertainty about parts of the reports.

There is uncertainty about the reporting of working hours and thus the calculation of full-time employees. This uncertainty is partly because some working hours are imputed.

There is also uncertainty regarding reporting of establishment and thus the linking of employees to the correct workplace. This can affect the distribution of the figures on the geographical areas and industries, especially in the public sector.

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

From 2008 the monthly data from Statistic Denmark's e-income register is used in the statistic. It means that the quality of the information about whether the employee in fact is working at the end of November is significantly higher than previously.

Reporting of working hours: There may be uncertainty about whether the reported hours are taken supplement and deduction into account compared to the normal number of working hours (e.g. paid overtime or unpaid leave) and whether the hours are properly periodised.

Imputation of working hours: When the number of working hours is missing or the number is considered not valid or plausible the working hours are imputed. The imputed working hours is about 5-15 percent of the total number of working hours but the number varies with respect to sector and industry and also over time.

Reporting of workplace: Employers with more than one workplace are obliged to report the activity unit of which the employee is linked. However, there are a number of employers, particularly in the public sector, where the reporting of establishment is incomplete or inadequate. Therefore the reported establishment is debugged on the basis of the business register and a statistical unit for the establishment of the job is imputed. This is done to make it possible to produce figures on geographical areas and detailed level of industries.

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

Normally the published figures are not revised.

However, if errors are detected in the published figures these will be corrected.

6 Timeliness and punctuality

The statistic is published 16-18 months after the reference date.

The statistic is usually published on the scheduled date without delay.

6.1 Timeliness and time lag - final results

The average time from the reference date 31 December until publishing date is 514 days:

- Publishing time 2014: 417 days
- Publishing time 2013: 478 days
- Publishing time 2012: 548 days
- Publishing time 2011: 601 days
- Publishing time 2010: 525 days

The longer publishing time in 2010-2012 was due to the transition to e-income register.



6.2 Punctuality

The EiB is usually published without delay compared to the scheduled date.

7 Comparability

The statistic has been published since 1990, but with data breaks during this period.

From 2008 the statistic is based on the e-income register and there are no data breaks in the period 2008-2012.

7.1 Comparability - geographical

The EiB can be difficult to compare with corresponding statistics internationally.

7.2 Comparability over time

The EiB statistic have been compiled since the reference year 1990.

It replaced the register-based workplace statistics, which had been compiled for the reference years 1980-1989, and which covered only establishments with employees. The methodology had remained largely unchanged from 1980 to 1989, so for that period comparability is good.

The introduction of the EiB statistic completed the coverage by adding information about self-employed and working spouses. Thus, establishments without employees also became part of the register basis from the reference year 1990. Furthermore, information about socio-economic status was included in the EiB. However, this improved coverage cannot be added to the data before 1990.

In 1993, the DB93 replaced the DSE77 as the official Danish classification of activities, and a break in the time series occurred. DB93 is fully implemented in in the EiB statistic 1994.

From 2002 the EiB include only establishments connected with enterprises, which have a certain activity.

In 2003 the classification of activities changes to DB03 and in 2008 the classification of activities changed to DB07.

From 2005 also secondary jobs as self-employed is included in the EiB.

In 2008 the e-income register also became the main data source to the EiB. The transition to the e-income register as the new data source means that there is a data break in the EiB from 2007 to 2008. The number of jobs at the end of November declined by around 71,000 as a result of the transition.

From 2008 all active jobs at the end of November are included. Earlier only the primary and secondary job was counted. At the same time jobs where the person is on maternity or sicknes leave were excluded. Before 2008 only jobs where the person was on labour market leave were excluded.



7.3 Coherence - cross domain

The EiB is based on the same data material as the register-based labour force statistic (RAS). However, some major conceptual differences should be noted.

RAS calculates only the primary employment, whereas EiB also includes information about other employee jobs.

Persons, who according to the work classification modul (AKM) have their primary income in the year as self-employed, are only included in RAS.

Also persons on leave from employment at the end of November are included in RAS, but not in EiB.

Furthermore job on establishments connected to enterprises with low activity are included in RAS, but not in EiB

7.4 Coherence - internal

There is full consistency. All establishments contain the same types of basic information.

8 Accessibility and clarity

The statistic is published in Nyt fra Danmarks Statistik (News from Statistics Denmark), Statbank.dk and Statistical Yearbook.

More detailed data can be purchased in Statistics Denmark's Customer Centre.

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

New statistics is published in an yearly article Nyt fra Danmarks Statistik (News from Statistics Denmark). You can see the latest version here.

8.5 Publications

The data are published in **Statistical Yearbook**.



8.6 On-line database

All data are available in Statbank Denmark. You can see the various tables here.

8.7 Micro-data access

Microdata can be made available through Statistics Denmark's Researcher service (Forskningsservice). Special needs services can be delivered from Statistics Denmark's Customer Centre.

8.8 Other

The statistical register is delivered yearly to Statistics Denmark's Customer Centre.

8.9 Confidentiality - policy

The making of the EiB follows Statistics Denmark's confidentiality policy.

8.10 Confidentiality - data treatment

Discretion is made according to Statistics Denmark's confidentiality policy.

Data cells with number of jobs are hidden if there are less than 3 establishments in a given cell.

8.11 Documentation on methodology

You can read more about the EiB here.

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 statistic is in the division of Labour Market. The person responsible is Michael Drescher, tel. +45 3917 3841, e-mail: mid@dst.dk

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