

**Documentation of statistics for  
Bankruptcies 2014**

## 1 Introduction

The purpose of the statistics on bankruptcies is to analyze trends in the number of bankruptcies as well as in selected characteristics of companies gone bankrupt. These trends are considered as an essential economic or short time indicators.

Compilation of the statistics was established in January 1979 based on a 'simple count method'. In 2009 the method was changed to a registry-based method.

## 2 Statistical presentation

The statistics show monthly the development in the number of announcements of bankruptcies, by industry, region, company age, turn-over and employment. Furthermore average company age, total turn-over and total employment (lost jobs) in bankrupt companies are calculated.

### 2.1 Data description

The statistics show the development in the number of announcements of bankruptcies, by industry and region.

Beginning in 2009 the statistics also show the number of bankruptcies according to company age, turn-over and employment. Furthermore average company age, total turn-over and total employment (lost jobs) in bankrupt companies are calculated.

The statistics is published monthly in News from Statistics Denmark and in Statbank Denmark.

### 2.2 Classification system

In the publications an adapted version of DBO7 (Danish Industrial Classification 2007) with 10 groups is used.

- Agriculture, forestry and fishing
- Manufacturing, mining and quarrying, and utility services
- Construction
- Trade and transport etc. G Wholesale and retail trade: G1 Sale and repair of motor vehicles: G2 Wholesale trade and G3 Retail trade. H Transportation and I Accommodation and food service activities.
- Information and communication
- Financial and insurance
- Real estate
- Other business services
- Public administration, education and health
- Arts, entertainment and other services
- Activity not stated

[For further information on DBO7 and previous Danish Industrial Classifications.](#)

The geographical distribution is on five Danish regions.

### **2.3 Sector coverage**

The statistics cover bankruptcies for companies.

### **2.4 Statistical concepts and definitions**

**Bankruptcy:** Legal actions against an insolvent debtor, whereby the debtor's property is seized to satisfy his creditors. The number of announcements of bankruptcies is counted excluding units from the Faroe Islands and Greenland. After the 'simple count method', bankruptcies of both enterprises and individuals (personal bankruptcies) were counted. After the registry-based method, only bankruptcies of enterprises are counted, i.e. bankruptcies associated with a 'CVR'-number.

**Company Age:** For companies gone bankrupt the company age is calculated as the difference between their start date (as registered in the Statistical Business Registry) and the date of the bankruptcy announcement.

**Industry Group:** A company is placed in an industry group according to its main activity. The most detailed level can be aggregated to fewer groups. In the bankruptcy statistics we use an adapted version with 10 groups. See more under classification system for more information about [DB07](#).

**Employment:** Employment data for the companies gone bankrupt stem from the Statistical Business Registry. Their original source is the so called 'eIndkomst-system'. Please consult its quality declaration for further details and definitions concerning the measure of employment.

**Turnover:** Turn-over data for the companies gone bankrupt stem from the Statistical Business Registry. Their original source is the statistics on 'Purchases and sales by industry' (the so called 'VAT statistics'). Turn-over is annual and based on data from the last calendar year. For further details and definitions concerning turn-over, please consult the declaration of contents for 'Purchases and sales by industry'.

### **2.5 Statistical unit**

Bankruptcies refer to legal units (CBR numbers).

### **2.6 Statistical population**

Companies gone bankrupt.

### **2.7 Reference area**

The publications covers all Denmark excluding Faroe Islands and Greenland. The geographical distribution is on five Danish regions.

### **2.8 Time coverage**

The statistic with its actual content was established in 2009.

## **2.9 Base period**

Not relevant for this statistics.

## **2.10 Unit of measure**

- Number of announcements of bankruptcies.
- Company age in years.
- Turn-over in million DKK.
- Employment in full time employed.

## **2.11 Reference period**

The reference period is the end of the month. A bankruptcy is counted in the month in which the announcement appears in the Danish Official Gazette (Statstidende).

## **2.12 Frequency of dissemination**

Monthly.

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

Is irrelevant to the statistics as the data are collected from The Danish Official Gazette.

No EU regulation.

## **2.14 Cost and burden**

There is no response burden as the data are collected from The Danish Official Gazette.

## **2.15 Comment**

Other information is not available.

## **3 Statistical processing**

Data from The Danish Official Gazette (Statstidende) are checked for missing reports and duplicates.

The announced bankruptcies in the month of reference are added on business sector, turnover, age, employment and geography.

The main series with the total number of bankruptcies is seasonal adjusted together with the series of bankruptcies in firms with employment.

## **3.1 Source data**

The Danish Official Gazette (Statstidende) and the Statistical Business Register.

### **3.2 Frequency of data collection**

Monthly.

### **3.3 Data collection**

Data are collected from The Danish Official Gazette (Statstidende) and the Statistical Business Register.

### **3.4 Data validation**

There are check for missing reports (missing days in data) and eventual duplicates.

No other validation.

### **3.5 Data compilation**

The announced bankruptcies in the month of reference are added on business sector, turnover, age, employment and geography.

### **3.6 Adjustment**

Seasonal adjustment is performed for the series with the total number of bankruptcies and the series with bankruptcies in firms with employment by using X-13 Arima without previous correction.

The quality indicators shows clear seasonal pattern and the series are therefore well qualified for correction.

No other corrections.

## **4 Relevance**

The statistic understood as a short time indicator is used by public and private decision-makers.

### **4.1 User Needs**

The statistic understood as a short time indicator is used by public and private decision-makers.

### **4.2 User Satisfaction**

There are no investigations of user satisfaction.

### **4.3 Data completeness rate**

There are no regulation requests or guidelines for publications or data deliveries from the statistics on bankruptcies.

Complete figures are made in the current publications.

## **5 Accuracy and reliability**

The quality and reliability of the number of bankruptcies are very high. There are no changes to former published data.

Company ages can be underestimated due to companies changes in the 'cvr'-number. Turn-over and employment figures does not necessarily reflect the situation on the time of bankruptcy as these data refer to an earlier reference period (year or quarter).

### **5.1 Overall accuracy**

The precision of the number of bankruptcies is very high. The number of bankruptcies is counted directly from the source, as a bankruptcy is valid only if announced in the Danish Official Gazette (Statstidende).

Company age is calculated from the start date in the Statistical Business Registry. This date is the start date for the specific 'cvr'-number, i.e. the company's administrative identification number in the Central Business Registry (Centrale Virksomhedsregister). A potential error arises when companies change 'cvr'-number for administrative reasons, in situation where the company for practical purposes can be considered the same. In such cases, company ages will be underestimated.

Data on turn-over and employment refer to an earlier reference period (year or quarter). They do therefore not necessarily reflect the size of the company at the time of bankruptcy as e.g. lay-offs can have happened in the mean time.

For information on inaccuracy concerning turn-over and employment data, please consult the declarations of content for 'Purchases and sales by industry' and 'Income-system', respectively.

### **5.2 Sampling error**

Not relevant for this statistics.

### **5.3 Non-sampling error**

Not relevant for this statistics.

### **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

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For information on inaccuracy concerning turn-over and employment data, please consult the declarations of content for 'Purchases and sales by industry' and 'eIncome-system', respectively.

## 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

Only final figures are published.

## 6 Timeliness and punctuality

The statistics has very high actuality as it nearly always is published on the fourth working day after the reference month.

Average timeliness 2012 - 6,2 days, 2013 - 5,7 days, 2014 - 5,2 days, 2015 - 3,8 days.

Very high punctuality.

### 6.1 Timeliness and time lag - final results

Average timeliness 2012 6,2 days, 2013 5,7 days, 2014 5,2 days, 2015 3,8 days.

## **6.2 Punctuality**

Punctuality in 2012, 2013, 2014 and 2015 100 pct.

## **7 Comparability**

The figures for bankruptcies before 2009 are not fully compatible with the later figures as the former figures also contain personal bankruptcies.

### **7.1 Comparability - geographical**

No information available.



## 7.2 Comparability over time

There can be different time of references for the statistics on bankruptcies and the information on turn-over and employment.

### *Changes in method*

In 2009, the production of the statistics was changed from a 'simple count' method to a registry-based method. The change in method affects comparability over time in several ways:

- a) with the registry-based method, personal bankruptcies are no longer included
- b) with the registry-based method, there will be more occurrences of 'activity not stated' as there will no longer be a manual classification of companies with this code in the registry (correspondingly, there will be fewer occurrences in the group 'Financial and insurance', as especially many holding companies are registered with 'activity not stated')
- c) with the registry-based method, bankruptcies that are announced more than once in the Danish Official Gazette (Statstidende) are counted only once - bankruptcies that are cancelled within the same month as their announcement will also be excluded.
- d) the new variables concerning company age, turn-over and employment are based on the registry-based method and can therefore not be calculated prior to 2009.

Data for January-December 2009 are produced and published by both methods. There will be a change in the methods from the publication for September 2010. Up to September 2010, data for the companies gone bankrupt, stem from the Statistical Business Registry. Their original source is the statistics 'Indicator for employees in employment' (the so-called ATP statistics). Now data will be based on the so-called eIncome-system, where 'o' from respondents are treated in another way than before. Data from the new eIncome-system will place more bankruptcies in the group 'non registered employment'. This will not influence on the total number of bankruptcies.

*Changes in industrial classification.* For the grouping by industry, there have been changes in the industrial classification nomenclature affecting comparability. For the period 1979 to 1992 the industrial classification nomenclature DSE 77 was used. For the period 1993 to 2008, the industrial classification was according to DB93 (Danish Industrial Classification of All Economic Activities) and its revision DB03. DB93 and DB03 are identical at the level of aggregation used in the statistics. Beginning in 2009, DB07, the Danish Industrial Classification based on NACE Rev. 2., is used. Data for the period 2005-2008 have been recoded to be available in DB07 groups.

*Changes in geographical divisions.* From 2007 onwards it is possible to obtain statistics broken down by region. Prior to 2007, the statistics is available broken down by 'province'.

### **7.3 Coherence - cross domain**

There is not necessarily coherence between the statistics of bankruptcies and statistics on the population of companies, even if there often are inquiries on the number of companies that potentially could go bankrupt.

This is among other things due to the definition of companies used in the population calculations where a company must meet demands on employment and turn-over - an activity demand. An example is the 'General enterprise statistics'. These demands are not used in the statistics of bankruptcies where we often see companies without employment or very low turn-over.

Another problem is the difference in the reference period where for example the 'General enterprise statistics' is annual and the statistics on bankruptcies is monthly.

There is more information on the concept of 'active companies' in the quality declaration for 'General enterprise statistics'.

The statistics on bankruptcies for the period up to 2008 inclusive cover personal as well as company bankruptcies and since then only company bankruptcies.

### **7.4 Coherence - internal**

There can be different time of references for the statistics on bankruptcies and the information on turn-over and employment.

## **8 Accessibility and clarity**

The monthly statistics on bankruptcies are published in News from Statistics Denmark and Statbank Denmark

- [Latest article with bankruptcies in News from Statistics Denmark.](#)
- [New and historical series on bankruptcies in Statbank Denmark.](#)

Annual publishing in Statistical Yearbook Statistical Ten-Year Review.

[Documentation of bankruptcies and data.](#)

### **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**

[Latest article with bankruptcies in News from Statistics Denmark.](#)

#### **8.5 Publications**

- Statistical Ten Year Review, in Danish: [Statistical Ten Year Review](#).
- Statistical Yearbook: [Statistical Yearbook](#).

#### **8.6 On-line database**

[New and historical series on bankruptcies in Statbank Denmark.](#)

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

There is no access to micro-data.

#### **8.8 Other**

There is access to special designed statistics as paid service.

#### **8.9 Confidentiality - policy**

The general policy of confidentiality in Statistics Denmark is described (in Danish) in [Danmarks Statistiks datafortrolighedspolitik](#)

There is generally no access to data on individual enterprises.

This imply in the field of paid services that it as principal rule won't be possible to combine company-demographic and geographic data on a detailed level.

#### **8.10 Confidentiality - data treatment**

There is generally not published statistics on individual companies.

#### **8.11 Documentation on methodology**

A methodical description of the 'simple count' method appeared in Statistiske Efterretninger 1981, nr. A10.

For the registry-based method, this quality declaration is the most detailed documentation that has been published.

Documentation of the statistics on bankruptcies in Times: [Documentation of bankruptcies and data.](#)

#### **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 Short Term Statistics. The person responsible is Søren Dalbro, tel. +45 3917 3416, e-mail: sda@dst.dk

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