

Documentation of statistics for Accounts Statistics for Non-Agricultural Private Sector 2013



## **1** Introduction

The purpose of Accounts statistics is to analyze the activity level and of the structure of the Danish business sector. This means that the statistics should be seen as a primary source of financial data for analytical studies of Danish business enterprises, including data required for the evaluation and conception of Government policies and decisions affecting the business community. Moreover, the accounts statistics are an essential input to the Danish national accounts statistics, and they provide the bulk of Denmark's contribution to Eurostat's structural business statistics at European level.

## **2 Statistical presentation**

The statistics are essentially aggregations of items of the annual accounts of business enterprises, notably items of the profit and loss account, the balance sheet and the statement of fixed assets.

## 2.1 Data description

The statistics are essentially aggregations of items of the annual accounts of business enterprises, notably items of the profit and loss account, the balance sheet and the statement of fixed assets. Thus, a wide range of subjects are covered, e.g. turnover, purchases, expenses, profits, assets, liabilities and investment. Results are compiled and published at both enterprise and establishment level, including distributions according to kind of activity, form of ownership, size group and region.

The data collected from all sources are combined in such a way that a complete set of accounting items is computed for each business enterprise and its component units (establishments) in the survey population. The resulting survey files can easily yield alternative breakdowns and tabulations, in addition to those published.

### 2.2 Classification system

The industry coding follows the Danish industrial classifications, Dansk Branchekode 2007 (DB07), which is the national version of NACE rev. 2. A complete overview can be found at the <u>DB07 site</u>.

### 2.3 Sector coverage

The private secondary and tertiary industries.

### 2.4 Statistical concepts and definitions

Average: Is calculated for each industry (or size group etc.) using the accumulated figures for the relevant accounting items. The figures of large enterprises will weigh more than the figures of small enterprises.

Capital and Reserves: The owners part of the capital of the enterprise. Is calculated as Total assets minus (Provisions for liabilities and charges plus Debts).

Cost of Goods Consumed: Purchases of goods and energy plus/minus changes in stocks.

Current Assets: Stocks, debts receivable, cash.

Enterprise: Usually corresponding to the legal unit, e.g. limited-liability corporations, sole traders, partnerships, etc. In a few cases several legal units which are run as one entity are gathered into one



enterprise.

Establishment: An enterprise or part of an enterprise, that is situated in a single location and produces one -- or mainly one -- sort of goods and services.

Financial Expenses: Interest payable and similar charges, depreciation etc. on financial current or fixed assets.

Financial Receipts: Receipts from interest, dividends, income from participating interests, profit due to appreciation and on exchanges.

Fixed Assets: Part of the capital of the enterprise which are meant to be kept e.g. land, buildings, machinery, equipment, patent, shares, and bonds.

Gross Profit Ratio: Turnover minus Cost of goods consumed minus Cost of subcontractors and other work done by others on your firms materials measured in per cent of Turnover.

Investment: Increase and decrease of assets. Increase (acquisitions) is stated at book value before any adjustments. Assets acquired through financial leasing are included. Decrease (disposals) is stated at selling price (if not known then the written-down value).

Long-term Debts: Debts payable later than 1 year.

Median: The enterprises are sorted according to their size of the relevant figure or ratio. The median is the figure or ratio of the enterprise which are placed exactly in the middle of this sequence. The figures of large enterprise will not weigh more than the figures of small enterprises.

Net Profit Ratio: Profit or loss before financial and extraordinary items measured in per cent of Turnover and Other operating income.

Number of Employees: Persons on the payroll in full-time equivalent units.

Number of Persons Employed: For corporations equal to number of employees. For sole traders etc. are added an estimated number of owners namely +1 for single proprietors/self employed and +2 for partnerships.

Other Operating Income: Secondary income.

Proprietary Ratio: Capital and reserves measured in per cent of Total liabilities.

Provisions for Liabilities and Charges: Obligations where the exact amount or due date is not known with certainty, e.g. deferred taxation.

Return on Equity: Profit or loss for the financial year after Corporation tax measured in per cent of the average of the Capital and reserves during the year.

Short-term Debts: Debts payable within 1 year.

Turnover: Turnover represents the net sales. Included are capitalised work performed by the firm for own purposes and all charges (transport, packaging, etc.) passed on to the customer. Excluded are reduction in prices, rebates, discounts, VAT and excise duties. Income classified as other operating income, financial income and extraordinary income in company accounts is also excluded from turnover.

Value Added: Turnover plus Other operating income minus consumption of goods and services.

Value Added (percent): Value added in per cent of Turnover and Other operating income.



## 2.5 Statistical unit

#### Enterprise

Usually corresponding to the legal unit, e.g. limited-liability corporations, sole traders, partnerships, etc. In a few cases several legal units which are run as one entity are gathered into one enterprise.

#### Establishment

An enterprise or part of an enterprise, that is situated in a single location and produces one -- or mainly one -- sort of goods and services.

### 2.6 Statistical population

Enterprise and establishment in the private secondary and tertiary industries.

#### 2.7 Reference area

Denmark.

#### 2.8 Time coverage

Year 2013.

### 2.9 Base period

Not relevant for this statistic.

#### 2.10 Unit of measure

The unit of measure is number, millions kr., thousand millions and percent depending on variable where it is published.

#### 2.11 Reference period

The accounts statistics for a given year t, relate to annual accounts ending in the period from 1 May of year t to 30 April of year t+1.

### 2.12 Frequency of dissemination

Annual statistics, both at enterprise level and at establishment level (regional data).



### 2.13 Legal acts and other agreements

The Act on Statistics Denmark (Act no. 599 of 22 June 2000), § 8 and 12.

Council Regulation no. 295/2008 on Structural Business Statistics (SBS) requires the EU countries to submit to Eurostat information regarding business revenues, expenditures, value added, employment, wages and salaries, investment, etc. In Denmark the bulk of this information is obtained from the accounts statistics.

## 2.14 Cost and burden

In 2013 the response burden imposed on business enterprises in reporting data for the accounts statistics was estimated at 4.8 mio. DKK.

## 2.15 Comment

For more information (in Danish) regarding the questionnaire, accounting concepts, etc., see: www.dst.dk/regn

## **3 Statistical processing**

Direct surveying. The most thorough coverage is extended to the firms that are selected for direct surveying. They are given the choice of either filling in a lengthy questionnaire or submitting their annual accounts plus detailed specifications. The questionnaire is modelled on the list of items set out in the Danish annual accounts legislation, so as to facilitate responding.



### 3.1 Source data

- Questionnaires
- The Central Customs and Tax Administration (SKAT data)
- The business register
- The Drugs Administration Agency (pharmacy accounts)

A) Direct surveying. The most thorough coverage is extended to the firms that are selected for direct surveying. They are given the choice of either filling in a lengthy questionnaire or submitting their annual accounts plus detailed specifications. The questionnaire is modelled on the list of items set out in the Danish annual accounts legislation, so as to facilitate responding. The data obtained by direct surveying are keyed into a data entry system which comprises error detection and verification procedures. Thus, the data are checked for accounting inconsistencies, and warning messages are written out if significant deviations are found when comparing with last year's data or with figures for firms in the same stratum (form of ownership / activity / size group). Frequently the respondents are contacted for clarification. The resulting data for the direct-surveyed firms are regarded as highly reliable. In terms of turnover these firms (including those of B below) accounted for 71 per cent of the total for 2013.

B) Pharmacies. All Danish pharmacies must submit a standardized set of accounts to the Drugs Administration, which sends a file containing the audited accounts to Statistics Denmark. On some points the pharmacy accounts differ from the items of Statistics Denmark's questionnaire, but it is possible to estimate the missing data, so the overall quality is high.

C) The accounts data from the Danish tax authorities (SKAT) does not comprise so many items as Statistics Denmark's questionnaire, but the quality of the data is regarded as high, because they are used for individual tax assessment. By stratified imputation the data aggregates from SKAT are distributed among the more detailed items, and in the opinion of Statistics Denmark the resulting item values are reasonably reliable. The firms contributed from SKAT accounted for 17 per cent of total turnover in the 2013 survey.

D) The rest. Many (especially small) firms are not covered by the sources A to C, so the available information is limited. Stratified imputation based on employment size groups is used to fill the gaps, but this method yields results with large margins of error. However, the firms of the "rest" population accounted for only 12 per cent of turnover in the 2013 survey, so the negative effect on the overall quality of the accounts statistics is limited.

## 3.2 Frequency of data collection

The accounts statistics for a given year t, relate to annual accounts ending in the period from 1 May of year t to 30 April of year t+1.

### 3.3 Data collection

Direct surveying. The most thorough coverage is extended to the firms that are selected for direct surveying. They are given the choice of either filling in a lengthy questionnaire or submitting their annual accounts plus detailed specifications. The questionnaire is modelled on the list of items set out in the Danish annual accounts legislation, so as to facilitate responding.

Online form and instructions can be found on the information page (in Danish).



### 3.4 Data validation

The data obtained by direct surveying are keyed into a data entry system which comprises error detection and verification procedures. Thus, the data are checked for accounting inconsistencies, and warning messages are written out if significant deviations are found when comparing with last year's data or with figures for firms in the same stratum (form of ownership / activity / size group). Frequently the respondents are contacted for clarification. The resulting data for the direct-surveyed firms are regarded as highly reliable.

#### 3.5 Data compilation

The Danish accounts statistics are produced in a three-stage process:

Questionnaires from the 7,500 business enterprises are received, validated and if necessary corrected and subsequently entered into a computerized system. Stratified results are calculated for this population of units. The 7,500 enterprises and the 230 pharmacies cover 71 percent of the total turnover.

Highlight results of some 91,700 business enterprises are added in the form of data from the Tax Register. The missing items are calculated by ratios based on the stratified results from the 7,500 enterprises. A new set of stratified results is calculated. The 91,700 enterprises cover 17 percent of the total turnover. In this way all the "missing" variables from the "Tax Register" enterprises are filled in.

The rest (about 108,000) of the business enterprises in the relevant sectors are added, in the form of information from the Danish Business Register. This information only covers turnover and employment (plus background information such as enterprise code number, kind of activity, name and address). So for most of "the rest" the accounting items are estimated by ratios with full-time equivalent employment based on the stratified results above. The 108,000 enterprises cover 12 percent of the total turnover.

### 3.6 Adjustment

Not relevant for this statistic.

### 4 Relevance

Applications: studies of business economics, regional finance studies, primary data for the Danish national accounts and for Eurostat's structural business statistics. Users: Public authorities, Eurostat, employers' and employees' federations, private firms, politicians, economists, scientist, journalists and students.

#### 4.1 User Needs

Users: Public authorities, Eurostat, employers' and employees' federations, private firms, politicians, scientists, economists, journalists, students.

Applications: studies of business economics, regional finance studies, primary data for the Danish national accounts and for Eurostat's structural business statistics.



## 4.2 User Satisfaction

There is not carried out a user satisfaction survey

### 4.3 Data completeness rate

For some industries no detailed figures are published due to confidentiality.

## **5** Accuracy and reliability

The accounts statistics are a reliable indicator of the activity level and of the structure of the Danish business sector. The highest data quality is achieved at the enterprise level, primarily because the firms prepare their annual accounts at that level. But also at the establishment level the published results for major activity groups and for counties are deemed to be reliable in spite of some elements of uncertainty.

## 5.1 Overall accuracy

The response rate for the sample population for reference year 2010 was 95 per cent.

Some items of the statistical questionnaire go beyond the level of disclosure prescribed by the annual accounts legislation. A case in point is the question concerning expenditure on fuel and energy. In those cases it is more difficult or more trouble for the firms to provide the requested information, and it is likely that some underreporting occurs.

Investment is another subject which is not itemized in the annual accounts, but information on the subject can be deduced from a separate table in the notes to the accounts where acquisitions and disposals of fixed assets are specified. So investment too could be underreported to some extent by those respondents who fill in and return the questionnaires. 2005 is the first year where investment information is available for the firms from SKAT, which means that the total investment estimates is assumed to be more reliable from this year.

The accounts statistics are less reliable at the establishment level than at the enterprise level because the allocation procedures are based on assumptions. But also at the establishment level the published results for major activity groups and for counties are deemed to be reliable.

## 5.2 Sampling error

The main basis of the figures (except number of enterprises, employees (in FTE) and persons employed (in FTE)) is questionnaire data collected for a sample of enterprises and information from TAX-authority. A sample can not give an accurate picture of the population, and therefore the figures are subject to some sampling errors. In addition, the figures are subject to a measurement uncertainty. This measurement error is not included in the calculations of the uncertainty.



### 5.3 Non-sampling error

Uncertainty due to the non response is minimized by repeated twitching by incomplete reporting. Incorrect data reported and misunderstandings are minimized by checking the reported figures.

For the calculation of confidence intervals the spread is used, which can be observed among the reported data. The spread is a measure of the variation in the data from individual firms, the larger the spread, the greater the variation. The calculation is performed to calculate the spread and thus confidence interval, taking into account the sample and the additional information from the TAX-authority. This special combination of a sample and additional information from the TAX-authority means that one can not use standard calculations and formulas when the spread is calculated. When you have information from two sources, it is not possible to calculate the spread exact - but only approximate. The method chosen to calculate approximate values for the spread is to take samples in the sample (Jackknife method).

#### 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 general assessment is that the quality of the statistics is high.

### 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

For larger method shifts or detection of errors, the figures may be revised.

## 6 Timeliness and punctuality

The publications usually have been available about 14 months after the end of the reference year and usually without delay in relation to the scheduled date.



### 6.1 Timeliness and time lag - final results

The statistics are scheduled to appear within 14 months after the end of the reference year (30 April).

## 6.2 Punctuality

The statistics are usually published without delay in relation to the scheduled date.

## 7 Comparability

The new type of accounts statistics is largely comparable with, and supplemented by, the SKAT data based accounts statistics which were discontinued after 1998. Statistics Denmark publishes statistics on various subjects related to business accounts, notably VAT-related turnover, manufacturers' sales of commodities, and short-term statistics of order books and sales. However, these statistics are not directly comparable with the accounts statistics, because of differences in units, coverage or concepts.

### 7.1 Comparability - geographical

Every year figures are submitted to the statistical office of EU, Eurostat. This includes special industry aggregates, not published nationally. Data for all EU countries can be found in the <u>Eurostat</u> <u>database</u>. The statistics are produced following the principles of an EU regulation, so the results are comparable.

### 7.2 Comparability over time

At enterprise level, comparable statistics (time series) are available from 1994 for construction and retail trade, from 1995 for manufacturing industries, from 1998 for wholesale trade, and from 1999 for the remaining part of the private secondary and tertiary industries. Starting with the reference year 2000 the estimation method has been changed for enterprises with no more than 1 employee (full-time equivalence) and from which there is no information from questionnaire or SKAT. This change in estimation method is considered to make the data for these enterprises more reliable, but makes it more difficult to compare with previous years, in particular in sectors where this type of enterprise makes up a substantial part.

Starting with the reference year 2002 The Danish Law on Annual Reports was revised. Among the major changes can be mentioned:

a) Intangibles and financial fixed assets and also assets acquired by financial leasing must to a higher extent than earlier be included in the balance sheet, and as a principal rule it must be valued at market prices, whereas earlier it could alternatively be valued at historical cost prices or the like.

b) Work in progress, not for own account (contract work), is moved from current stocks to debts receivable.

The previous type of accounts statistics for manufacturing industries, which ended with the year 1994, covered all manufacturing enterprises with 20 or more employees. The new type of accounts statistics covers all enterprises irrespective of size. Consequently, the two types of statistics are not directly comparable.

At establishment level, comparable statistics are available from 1995 for construction, retail trade



and manufacturing, from 1998 for wholesale trade, and from 1999 for the remaining part of the private secondary and tertiary industries.

The accounts statistics do not cover inactive businesses and enterprises with very limited activity. The threshold limit regarding the level of economic activity required, was raised substantially with effect from the reference year 1999. Until 1998 an enterprise to be included in the statistics should have employees or an annual VAT at at least 20,000 DKK. Since 1999 to be included in the statistics an enterprise should have had an annual performance corresponding to at least a half year's work for one person. Consequently, the number of enterprises and establishments (workplaces) dropped considerably and the number of employed people dropped slightly. The effect on the economic variables relating to the accounting items was minimal.

The purpose of Accounts statistics is to analyze the activity level and of the structure of the Danish business sector. This means that the statistics should be seen as a primary source of financial data for analytical studies of Danish business enterprises, including data required for the evaluation and conception of Government policies and decisions affecting the business community. Moreover, the accounts statistics are an essential input to the Danish national accounts statistics, and they provide the bulk of Denmark's contribution to EUROSTAT's structural business statistics at European level. Until the late 1980's, Statistics Denmark produced questionnaire-based accounts statistics covering manufacturing industries, construction and the distributive trades. Apart from manufacturing, these statistics were discontinued because it was introduced in 1986, that Danish business enterprises should submit to the tax authorities (SKAT) a standardized list of items from their accounts. These items were well suited for statistical purposes, but just a few years later the list of items was cut drastically and many firms were exempted from the system, so it became necessary to reintroduce statistical questionnaires and use the SKAT data as a supplement only. Otherwise it would not have been possible to satisfy national and Eurostat requirements in the field of structural business statistics. From 2005 the following accounts data are available from SKAT: turnover, consumption of goods, depreciations, profit or loss before financial and extraordinary items and corporation tax, profit or loss before corporation tax, corporation tax, closing stocks, fixed assets, capital and reserves, total assets/liabilities, increase in investment, and decrease in investment. Furthermore are from SKAT received employers' reports on the wages and salaries to their employees. The new type of business accounts statistics started with the reference year 1994, covering construction and retail trade at the enterprise level. Manufacturing was added from 1995, when the former type of statistics for that sector was discontinued. At the establishment (i.e. workplace) level, regional statistics have been published since the reference year 1995, covering manufacturing, construction and retail trade. Wholesale trade was added from 1998 and the remaining part of the private secondary and tertiary industries from 1999. So results are published at the national level relating to enterprises (legal units) and from 1995 also at the regional level relating to workplaces. The new statistics of business accounts cover construction and retail trade from the reference year 1994 at enterprise level (i.e. for legal units, such as corporations and sole traders) and from the reference year 1995 at establishment (workplace) level. The coverage was extended to manufacturing industries from 1995, to wholesale trade from 1998, and to the remaining part (with a few exceptions) of the service industries from 1999 (air transport, post and telecommunications only from 2001).

#### 7.3 Coherence - cross domain

The new type of accounts statistics is largely comparable with, and supplemented by, the SKAT data based accounts statistics which were discontinued after 1998. Statistics Denmark publishes statistics on various subjects related to business accounts, notably VAT-related turnover, manufacturers' sales of commodities, and short-term statistics of order books and sales. However, these statistics are not directly comparable with the accounts statistics, because of differences in units, coverage or concepts.

Statistics Denmark Sejrøgade 11 DK 2100 København Ø



## 7.4 Coherence - internal

Not relevant for this statistic.

# 8 Accessibility and clarity

The statistics are published in <u>NYT from Statistics Denmark, in Danish</u> and <u>Statbank Denmark</u>. Summaries are given in the *Statistical Yearbook* and in the *Statistical Ten-Year Review*.

### 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: <u>Release Calender</u>.

#### 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

The figures are published in a yearly news release, <u>NYT from Statistics Denmark, in Danish</u>.

#### 8.5 Publications

Summaries are given in the Statistical Yearbook and in the Statistical Ten-Year Review.

#### 8.6 On-line database

The accounts statistics are available online from Statbank Denmark.

#### 8.7 Micro-data access

The survey data are organized in annual files comprising a complete set of accounting items for every single business enterprise and its component units (establishments). The survey files can easily yield alternative breakdowns and tabulations, in addition to those published. There are also some files ("sum files") containing aggregations for activities, kinds of ownership, size groups and regions.

### 8.8 Other

The survey data are organized in annual files comprising a complete set of accounting items for every single business enterprise and its component units (establishments). The survey files can easily yield alternative breakdowns and tabulations, in addition to those published.



## 8.9 Confidentiality - policy

In the compilation the confidentiality policy of Statistics Denmark is followed 'link, in Danish'.

### 8.10 Confidentiality - data treatment

In the compilation of the account statistics the confidentiality policy of Statistics Denmark is followed <u>(link, in Danish)</u>.

### 8.11 Documentation on methodology

A description of concepts and methods is published at this page, in Danish.

## 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 Business Development. The person responsible is Charlotte Hansen, tel. +45 3917 3177, e-mail: chh@dst.dk

### 9.1 Contact organisation

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