

Documentation of statistics for Services of service industries 2023



1 Introduction

The purpose of the statistics Services of Service Industries is to provide information about turnover and types of services provided by enterprises within a number of service industries. The statistics is also used for revision of activity classifications in the Business Statistical Register.

The statistics is a part of EU Structural Business Statistics (SBS). Some industries have been covered since 1995, whilst others have been covered since 2007.

In its current form the statistics is comparable from the reference year 2023 where the statistics was changed to only cover enterprises with at least 20 employees.

2 Statistical presentation

The statistics encompasses 10 sub-statistics where each one provides information on the distribution of total turnover on products and services provide by enterprises in a specific industry according to the classification of products by activity (CPA).

2.1 Data description

Within 10 different industries total turnover of the enterprises is distributed across a range service that correspond to the particular industries. These statistics includes all enterprises with at least 20 employees within these particular industries.

In the StatBank, there is one table for each of the 10 industries:

- Computer Services
- · Legal Services
- · Accounting, Bookkeeping, Auditing Activities and Tax Consultancy
- Management Consultancy Activities
- Architectural Activities
- Engineering Activities and Related Technical Consulting
- Technical Testing and Analysis
- Advertising
- Market Research and Public Opinion Polling
- Temporary Employment Agencies and Other Human Provision Services

For Advertising services the turnover is also distributed on type of advertising media. Temporary employment agencies and other human provision services the number of temporary hours sold by activity is also accounted for.

2.2 Classification system

The statistics uses the 6-digit activity codes from the danish activity classification, <u>Dansk</u> <u>Branchekode 2007 (DB07)</u> which is a national version of NACE rev 2. The services are classified according to the european Statistical Classification of Products by Activity - <u>CPA 2.1</u>

2.3 Sector coverage

The statistics cover certain industries within the private service industries.



2.4 Statistical concepts and definitions

Service: A non-material product in the form of a work effort that benefits the recipient and can be priced similarly to a good. In the statistics Services of service industries, services are classified according to the EU's product classification CPA (Classification of Products by Activity).

2.5 Statistical unit

The units in the statistics are enterprises. Each enterprise equates to one legal unit, which is defined by their CVR-number in the Business Statistics Register of Statistics Denmark.

2.6 Statistical population

The statistics covers enterprises with at least 20 employees ultimo November in the reference year. For Legal Services the statistics covers enterprises with at least five employees.

2.7 Reference area

Denmark

2.8 Time coverage

The statistics covers the time period from 2023 onwards.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

The unit of measurement is 1.000 kr.

2.11 Reference period

The statistics covers the fiscal year.

2.12 Frequency of dissemination

Computer services, Advertising and Temporary employment agencies are disseminated yearly.

Engineering activities, Architectural activities, Legal activities, Market Research and Technical Analysis and Testing are disseminated for odd years.

Accounting and bookkeeping and management consultancy are disseminated for even years.



2.13 Legal acts and other agreements

The Act on Statistics Denmark (Lov om Danmarks Statistik), Section 8, cf. Order no. 599 of 22 June 2000.

From the reference year 2008: Regulation (EC) No. 295/2008 of the European Parliament and of the Council of 11 March 2008 concerning structural business statistics.

2.14 Cost and burden

For the reference year 2023 the respondents used in total 882 hours on the reporting to this statistics.

2.15 Comment

Further information can be found at the <u>subject page</u> for these statistics, or by contacting Statistics Denmark directly.

3 Statistical processing

Data is collected by online questionnaire from all enterprises within the population. In the questionnaire the enterprises have to break down their turnover by products and their total exports broken down by residence of client within and outside of the EU. The reported data is checked for errors, for instance by comparing the turnover distribution with previous submissions. The collected data is grossed up to the population level by including turnover from the Accounts Statistics for Non-Agricultural Private Sector.

3.1 Source data

All enterprises that according to the Business Statistical Register are placed within one of the corresponding activities as described under 'sector coverage' and which has at least 20 employees, are drawn for these statistics. All the drawn enterprises are requested to submit via online questionnaire. Accounts Statistics for Non-Agricultural Private Sector. is used to compile the results and insure consistency in the turnover figures.

The sub-statistics cover the following industries, with their corresponding codes according to the Danish Industrial Classification 2007 (DB07):

-Computer Services (DB07: 58.21.00, 58.29.00, 62.01.00, 62.02.00, 62.03.00, 62.09.00, 63.11.00, 63.12.00) -Legal Services (DB07: 69.10.00) -Accounting, Bookkeeping, Auditing Activities and Tax Consultancy (DB07: 69.20.00) -Management Consultancy Activities (DB07: 70.21.00, 70.22.00) -Architectural Activities (DB07: 71.11.00) -Engineering Activities and Related Technical Consulting (DB07: 71.12.10, 71.12.20, 71.12.30, 71.12.40, 71.12.90) -Technical Testing and Analysis (DB07: 71.20.10, 71.20.20, 71.20.90) -Advertising (DB07: 73.11.10, 73.11.90, 73.12.00) -Market Research and Public Opinion Polling (DB07: 73.20.00) -Temporary Employment Agencies and Other Human Provision Services (DB07: 78.10.00, 78.20.00, 78.30.00)



3.2 Frequency of data collection

Data is collected annually and biannually depending on activity.

3.3 Data collection

Collection for this statistics is done by online questionnaire. Draft questionnaires can be accessed via the links below:

- <u>Computer Services</u>
- Legal Services
- · Accounting, Bookkeeping, Auditing Activities and Tax Consultancy
- Management Consultancy Activities
- Architectural Activities
- Engineering Activities and Related Technical Consulting
- Technical Testing and Analysis
- Advertising
- Market Research and Public Opinion Polling
- Temporary Employment Agencies and Other Human Provision Services

3.4 Data validation

The are various forms of validation built into the online questionnaire, i.e. the percentagewise turnover distributions have to add up to 100 in order to continue with the questionnaire. For the temporary agencies the hourly pay for the temporary workers is calculated, if it falls outside of a certain interval the enterprise has to confirm the deviation or adjust the numbers. The submitted turnover distributions is checked for errors and validated in order by size of enterprise turnover. Here is the turnover distribution of each enterprise is compared to submissions from previous years and if there are large discrepancies/changes the enterprises are asked to confirm the changes.

3.5 Data compilation

The turnover and export distributions submitted by the enterprises is coupled with the turnover for the target population from the Accounts statistic for the private non-agricultural sector, and together with the overall distributions amongst the submissions the population turnover is used to correct for missing units.

3.6 Adjustment

Not relevant for these statistics.

4 Relevance

The statistics is used among enterprises when planning and provides an overview of the development taking place in the service sector. Furthermore the statistics is an input to national accounts in Statistics Denmark regarding the service sector. The statistics is also used of the European Statistic bureau, Eurostat, to create EU-statistics about Business Services.



4.1 User Needs

The statistics contributes to the production of knowledge regarding the service sector. The statistics is used among enterprises when planning and by providing an overview of the service sectors composition and development.

Furthermore the statistics is an input to Statistics Denmarks production of the national accounts and by the European Statistical Office, Eurostat, for the compilation of European level statistics on the service sector.

4.2 User Satisfaction

There is no formal user forum. Responses from users points towards as wish for more detailed information, i.e. export on a product level for each activity, and that data discontinuities make it hard to compare the statistics over time.

4.3 Data completeness rate

The statistics covers a delivery to Eurostat in the SBS-domain (Structural Business Statistics) and fully live up to the requirements herein. Some turnover for some services are not published as some disclosure control is applied due to confidentiality in the both the national and the European publication.

5 Accuracy and reliability

This statistics turnover breakdowns by product is sourced from submission from enterprises that that make up between 96 and 100 pct. of the total turnover within each of the activities. This precision is achieved by having only a few missing enterprises within each activity. Additionally the turnover is aligned with information from the Accounts Statistics for Non-Agricultural Private Sector, which in turn is complied from a large sample, administrative sources and XBRL-accounts from the Danish Business Authority.



5.1 Overall accuracy

These statistics gives a precise picture of the populations' total turnover, as this is taken from the Accounts Statistics for Non-Agricultural Private Sector.

There can be some uncertainties regarding the distribution of turnover on the various products, this can be due to missing responses, wrong activity codes, business closure, uncertainty regarding enterprise size at the time of sampling from the Business Stastistical Registry and that enterprises can have difficulties coupling their activities with the questions.

There is a large certainty around the overall turnover distribution amongst products, as the received questionnaires covers between 96 and 100 pct. of the total turnover within each population. As these statistics do not account for enterprises with less than 20 employees (less than 5 for legal activities) it is likely that the product breakdowns within each activity would be different if smaller enterprises were included.

For each activity the useable questionnaires covered the following share of the total turnover within the target population:

- Computer services: 97 pct.
- Temporary employment agencies and other human provision services: 96 pct.
- Advertising services: 97 pct.
- · Legal activities: 99 pct.
- Architectural activities: 99 pct.
- Market research and public opinion polling: 99 pct.
- Engineering activities and related technical consultancy: 96 pct.
- Technical testing and analysis: 100 pct.
- Accounting, book-keeping and auditing activities: Not collected for 2023
- Business and management consultancy activities: Not collected for 2023

5.2 Sampling error

The sampling error is equal to zero, as all enterprises within the population are requested to submit.



5.3 Non-sampling error

The population is defined by the industry concerned, the enterprises registered in the Business Register by themselves, which corresponds the the industry they're registered with in CVR - Central Business Register. Errors of classification of the industries is expected. This means that there may be enterprises in the population that really should not be classified as an enterprise in the concerned industry, but also companies in the concerned industry can be classified with the wrong industry.

In the context of fault tracing and quality assurance of the statistics, a number of these errors continuously are found and corrected. Companies that are incorrectly classified within the concerned industry incorrectly increases the number of included enterprises.

On the other hand there will be less enterprises in the population if they are classified entirely outside the concerned industry, even though they should properly be classified within the concerned industry, which can be difficult difficult to detect, but can be found also. The significance of these coverage problems are generally small because the volume is estimated to be small.

Uncertainty due to lapse, incorrectly reported numbers and misunderstandings has sought to minimize by repeated reminders by non-reporting, as well as by substantial verification of the reported figures.

Generally the services in the questionnaire are based on Statistical Classification of Products by Activity CPA <u>CPA 2.1</u>, with an adjustment to Danish conditions. There can be uncertainties in the distribution of turnover and export by services when the services CPA 2.1are not quite commensurate with the classification of products of the firms.

Displayed below is the number of useable submissions and lapse percentages for each activity in 2023 based on the total population of units within each activity:

- Computer services: 741 useable questionnaires within the population of 803 units, equal to a lapse of 8 percent.
- Temporary employment agencies and other human provision services: 204 useable questionnaires within the population of 248 units, equal to a lapse of 18 pct.
- Advertising services: 95 useable questionnaires within the population of 106 units, equal to a lapse of 10 pct.
- Legal activities: 325 useable questionnaires within the population of 358 units, equal to a lapse of 9 percent.
- Architectural activities: 76 useable questionnaires within the population of 80, equal to a lapse of 5 percent.
- Market research and public opinion polling: 19 useable questionnaires within the population of 20 units, equal to a lapse of 5 percent.
- Engineering activities and related technical consultancy: 182 useable questionnaires within the population of 206 units, equal to a lapse of 12 percent.
- Technical testing and analysis: 33 useable questionnaires within the population of 33 units, equal to a lapse of o percent.
- Accounting, book-keeping and auditing activities: Not collected for 2023
- · Business and management consultancy activities: Not collected for 2023



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 considered to be of high quality due to following factors: The statistics is relevant as it illuminates the amount of services provided by enterprises with at least 20 employees within a range of service activities. The statistics is based on the common European classification of products by activity (CPA) which makes it possible to compare the Danish market for services within the given activities with those in other European countries. The statistics provides a precise and reliable picture of the turnovers distribution on the various services provided by enterprises with at least 20 employees within the given activities. The statistics is current under the precondition that the enterprises have to have submitted their annual accounts, hence the publication 11 months after the end of the reference year. The statistics is consistent in its use of the product classification by activity, however for some activities more granular breakdowns are used in the national publication. Its hard to compare the statistics over time due to several discontinuities in data due to changes to activity codes, classification of products, calculation and sampling methods, latest in 2023 where the targetpopulation was altered. The data used as basis for these statistics is of high quality, due to both a high rate of response and a thorough examination and validation of the submitted data.

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

The publication is not revised.

6 Timeliness and punctuality

The statistics is published ca. 11 months after the end of the reference year. Usually the statistics is published without delays in regards to the announced publication date.



6.1 Timeliness and time lag - final results

The statistics are published in the Statbank circa 11 months after the end of the reference year with numbers that are aligned with the preliminary Accounts Statistics for Non-Agricultural Private Sector. The published figures are not revised in the national publication, but figures aligned with the final Accounts Statistics for Non-Agricultural Private Sector is delivered to Eurostat 18 months after the end of the reference year.

6.2 Punctuality

The statistics is usually published without delay regarding to the announced date.

7 Comparability

For some industries the statistics was first compiled in 1995 and 1996, whilst others were first compiled in 2001, 2003 and 2007. Since then there have been various adjustments and changes to the calculation method, activity codes, sampling method and questionnaire. There is consistent a consistent timeseries for the reference years 2012/2013 to 2021/2022. In its current form the statistics is comparable from 2023 and onwards, covering only enterprises with at least 20 employees. These statistics are produced according to the guidelines in the European Business Statistics Manual, and is thus comparable to similar statistics from other EU countries.

7.1 Comparability - geographical

To Eurostat the data are provided only for enterprises with less 20 person employed (according to EU's regulation). For Eurostat the statistics is aligned with the turnover from the final Accounts Statistics for Non-Agricultural Private Sector, where as data in the national Statbank publication is algined with the turnover from the preliminary Accounts Statistics for Non-Agricultural Private Sector.

In the Statistics Database of Eurostat the distributions of the turnover by services and residence of client are published on <u>EUROSTAT's homepage</u>. The comparability between countries is considered to be good, as the statistics are produced according to common guidelines and principles.

7.2 Comparability over time

There have been several changes to the activity codes and the classification of products by activity which requires changes changes to the questionnaire. Furthermore there have been changes to calculation and sampling methods. Therefore these statistics are not fully comparable over time.

For the reference year 2003 there is a data discontinuity due to the implementation of NACE rev. 1.1 and the product classification by activity. For the reference year 2007 there is a data discontinuity due to the implementation of NACE rev. 2 and the product classification by activity. For the reference years 2013 there is a data discontinuity due to changes to the calculation and sampling method. this timeseries is consistent up until the reference year 2022 and has been backcasted for 2012.

From 2023 and onwards the the statistics is comparable year by year.



7.3 Coherence - cross domain

The statistics <u>Production and turnover in service sector</u> compiles monthly and quarterly cyclical developments for the service industries. The statistics are compiled based on turnover indices from the statistic Purchases and Sales by Enterprises and on price indices from Producer Price Index for Services (SPPI). The source material is different from Services of Service Industries, there are no detailed product breakdowns and some industries are compiled together.

7.4 Coherence - internal

Internal consistency with the Accounts Statistics for Non-Agricultural Private Sector is achieved by identifying the enterprises with their legal unit number.

8 Accessibility and clarity

These statistics are published in a danish press release about Services of Service Industries. In the StatBank, these statistics can be found under the subject <u>Services of service industries</u>. For more information go to the <u>subject page</u>. International comparable figures are available through Eurostat's webpage under <u>Business Services</u>.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

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.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.4 News release

These statistics are published together with a danish press release, New from Statistics Denmark on Services of Service industries.

8.5 Publications

Not relevant for these statistics.



8.6 On-line database

The statistics are published in the StatBank under <u>Services of Service Industries</u> in the following tables:

- SERV2501: Turnover in Computer Services by service
- <u>SERV2502</u>: Turnover in Temporary employment agencies and other human provision services by services
- <u>SERV2503</u>: Turnover in Advertising services by services
- <u>SERV2504</u>: Turnover in Legal Activity by services
- SERV1406: Accounting, book-keeping and auditing activities by services, turnover and export
- <u>SERV1407</u>: Other business and management consultancy activities by services, turnover and export
- SERV2507: Turnover in Architectural activities by services
- SERV2509: Turnover in Technical testing and analysis by services
- <u>SERV2509</u>: Turnover in Engineering activities and related technical consultancy by service
- <u>SERV2510</u>: Turnover in Market research and public opinion polling by service
- SERV2511: Number of hours sold in permanent placement by industry
- <u>SERV2512</u>: Advertising services by media

8.7 Micro-data access

Researchers and other analysts from authorized research institutions, can be granted access to the underlying microdata by contacting Research Services.

8.8 Other

These statistics are available through Eurostat's webpage under **Business Services**.

8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is applied.

8.10 Confidentiality - data treatment

In the case of one or two enterprises accounting for 85 pct. of the turnover within a given product, the figure for the product will not be disclosed along with a another product subject to secondary disclosure control.

8.11 Documentation on methodology

There are no separate documentation on methodology for these statistics.

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 these statistics is in the division of Business Dynamics, Business Statistics. The contact person is , tel.: , and e-mail: .