**Documentation of statistics for
Business Demography 2020**

1 Introduction

The purpose of the Business Demography is to provide information about the development of enterprise births and deaths as well as the survival of new enterprises over a period of five years. The statistics is comparable from 2001 onwards.

2 Statistical presentation

The statistics cover the annual number of enterprise births and deaths and provides information on turnover and employment. The results are broken down by industry, size class, enterprise form, and geographical location. The statistics are disseminated in Nyt from Statistics Denmark and in our statbank.

2.1 Data description

The statistics cover the number of enterprise births and deaths. Furthermore, the survival of new enterprises is followed over a period of 5 years. Information about the turnover and employment of the enterprises are published.

2.2 Classification system

In Denmark results are published by sector, with breakdowns by Danish regions and size classes based on employment. Results to Eurostat are delivered using the international activity classification, NACE Rev. 2.

2.3 Sector coverage

The statistics includes all NACE codes (sectors).

2.4 Statistical concepts and definitions

Enterprise Birth: A birth amounts to the creation of a combination of production factors with the restriction that no other enterprises are involved in the event. Births do not include entries into the population due to mergers, break-ups, split-off or restructuring of a set of enterprises. It does not include entries into a sub-population resulting only from a change of activity. A birth occurs when and enterprise starts from scratch and actually starts activity. An enterprise creation can be considered an enterprise birth if new production factors, in particular new jobs, are created. If a dormant unit is reactivated within two years, this event is not considered a birth.

Enterprise Death: A death amounts to the dissolution of a combination of production factors with the restriction that no other enterprises are involved in the event. Deaths do not include exits from the population due to mergers, take-overs,break-ups or restructuring of a set of enterprises. It does not include exits from a sub-population resulting only from a change of activity. An enterprise is included in the count of deaths only if it is not reactivated within two years. Equally, a reactivation within two years is not counted as a birth.

2.5 Statistical unit

The statistics is published at enterprise level.

2.6 Statistical population

Number of births and deaths as well as survival of enterprises up till 5 years old.

2.7 Reference area

The statistics covers all of Denmark.

2.8 Time coverage

The statistics covers the period 2001 onwards.

2.9 Base period

Not applicable.

2.10 Unit of measure

Number of enterprises.

2.11 Reference period

01-01-2020 - 31-12-2020

2.12 Frequency of dissemination

The statistics are compiled annually.

2.13 Legal acts and other agreements

Business demography data submitted to EU in accordance with SBS regulation, 295/2008. (Annex IX).

2.14 Cost and burden

The statistics is based on administrative data. There is consequently no response burden associated with this.

2.15 Comment

Additional information is available on the statistics' web page or by contacting Statistics Denmark.

3 Statistical processing

Data is collected from the Statistical Business Register. Subsequently various processes are undertaken to determine whether or not an enterprise is new (enterprise birth), terminated (enterprise death), or surviving. The controls are done to validate if the new enterprises, which exists in the administrative reality, are in fact real new enterprises, which enters the economy, or if it is an activity that is continued after a takeover or e.g. a split of an existing enterprise.

3.1 Source data

The Central Business Register is the basis of the statistics.

Data elements are obtained from the [General enterprise statistics](#).

3.2 Frequency of data collection

Annually.

3.3 Data collection

The statistics is based on register data.

3.4 Data validation

The statistics is based on validated data. The statistics is validated against earlier reference years on industry. Moreover, large new enterprises are manually validated regarding the status as a genuine enterprise birth or death. This is amongst other things done using address information and the employment information. What is validated is if the new enterprises which exists in the administrative reality, are in fact real new enterprises, which enters the economy, or if it is an activity that is continued after a takeover or e.g. a split of an existing enterprise.

In addition, an extra manually check of enterprises with more than 10 full-time employees or with a turnover of 20 mn. DKK or more is performed. This might indicate that the enterprise is formed on basis of e.g. a split-off from a former enterprise, and thereby not being a genuine new enterprise.

3.5 Data compilation

Data is aggregated from Micro-data delivered by the Statistical Business Register to the level of publication.

3.6 Adjustment

No data correction is made, except what is already described under the section for data validation and statistical processing.

4 Relevance

The statistic is used by ministries and governmental agencies, regional and county authorities as well as private sector institutions and enterprises

The statistic is a central indicator for entrepreneurship and for sustainability in the economy, and there is a large demand for using the output in combination with other sources, and following the development of enterprises who survive.

4.1 User Needs

The statistics is used by ministries and governmental agencies, regional and county authorities as well as private sector institutions and enterprises. The statistics is also used for service tailor made statistics, where data are combined with different sources of data. Further, the statistics is used by researchers.

4.2 User Satisfaction

There is a large demand for this statistic as a central indicator for entrepreneurship. The national publication covers the entire economy, but many users get tailor-made subpopulations to shed light on different parts of the economy.

There is also a large demand to combine data about the new enterprises with all of our other business statistics, and follow the development for enterprises who survive.

4.3 Data completeness rate

Concerning data completeness the statistics lives up to requirements in regulations and guidelines.

The compilation method used in connection with submitting data to the EU differs from the present national compilation method, mainly on sector and ownership cut-off. The national dissemination covers all sectors and ownership structures, where method used for data transmitted to EU follows the definition by the OECD and Eurostat (cf. Eurostat OECD Manual on Business Demography Statistics, 2007 edition).

5 Accuracy and reliability

The statistics is based on validated register data.

Uncertainty is related to relations between units and work places, which are primarily based on digital income reporting by enterprises, and lack of knowledge concerning the transfer of activities from one enterprise to another, including the separation of activities.

5.1 Overall accuracy

For a few single units, the lack of references may imply that economic and employment data are not correctly linked. Attempts are made to remedy this problem by subjecting, especially the largest enterprises to a manual check and data editing. In the case of enterprises with employees, the data on where the employees have been in employment during the course of a year are applied, as an overall shift of workplace for several employees may imply that an activity has been transferred to another enterprise.

The rate of coverage is almost 100 per cent for all enterprises which are obliged to register according to the Danish tax and customs legislation or the business legislation. Units, which might have been engaged in a major financial activity, but are not obliged to register according to the Danish VAT legislation and have no employees, are in a few single cases not recorded on the Central Business Register, and are consequently excluded from the Statistics on business demography.

5.2 Sampling error

Not relevant for this statistics.

5.3 Non-sampling error

The uncertainty associated with the statistics is related to the mechanical and manual processing of special employment information that attempts to eliminate companies that are not really new in the corporate structure, but have only arisen or ceased as a result of demographic events such as acquisitions or split-offs.

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 uncertainty associated with the Business Demographic statistics is associated with the references between the entities which mainly comes from T & S's Business System, and lack of knowledge of the transfer of activity from one company to another, including the separation of activity. Failure to do so can result in economic and employment data are not correctly linked to the individual units. The problem is being tackled by subjecting, especially the largest firms, to a manual control and error recovery. For businesses with employees, the knowledge on where the employees have been employed during the year. A large shift of employees can mean the transfer of activity to another unit.

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

The number of deaths is revised annually for the preceding period, when the number of re-activations are known.

6 Timeliness and punctuality

The statistics is published annually. The publication is usually available 18 months after the end of the reference year. From the reference year 2016 the statistics is published with preliminary data 10 months after the end of the reference year.

6.1 Timeliness and time lag - final results

The statistics are published annually. The statistics are published about 18 months after the end of the reference year. The relatively long time of publication is primarily due to the fact that the primary statistics included in the Statistics on business demography must be finally compiled, before the Statistics on business demography can be finally compiled. The real period when all basic registers are available until publication is approximately 3 months.

From the reference year 2016 the statistics is published with preliminary data 10 months after the end of the reference year.

6.2 Punctuality

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

7 Comparability

The national published Business Demography is a sub-population of the Danish published General enterprise statistics.

Covering private enterprises excluding agriculture, the Danish published Business demography can be compared to the Business Statistics published by Eurostat.

7.1 Comparability - geographical

The statistics can be compared with the Business Demography published annually by Eurostat.

There is a difference regarding coverage. While the Danish published Business Demography include all NACE codes and ownerships, the European published Business Demography only include NACE Rev. 2 B-N excluding K642, which is a coverage in sectors comparable to the coverage in the structural business statistics. On voluntary basis P-S excluding S94 are also published. Moreover, following legal forms are included: Sole proprietor, Limited liability company and Partnership and other legal forms.

7.2 Comparability over time

It is not possible to compare the Statistics on business demography with the earlier published Statistics on increase in new enterprises (published 1992-2001). Considerable changes has been made in the compilation method:

The business demography only include really active companies, the previous statistic included all companies with just the smallest activity. Businesses without activity are excluded in both statistics. Business demographics include previously registered companies that receive economic activity. The previous statistic included only newly registered units, however, measured at the time of registration as taxable. Business demographics include companies in all industries. The previous statistics included only companies in industries subject to VAT. Business demography includes companies in all sectors, where the previous statistic was limited to companies in the private sector. Business demography is based on information from the companies' accounts. In the previous statistics, revenue was calculated on the basis of the VAT declared revenue. It gives a difference, among other things. because the revenue from the accounts is calculated excl. taxes and duties, while the VAT declared revenue is incl. taxes. Business demography also includes an count of the continuing new companies for up to 5 years after the year of establishment, and a count of companies that cease to exist.

The statistics changed from Danish Industrial Classification 2003 to 2007 in 2009.

From the reference period 2009 the Business Demography started to utilise the electronic income register as a data source for the estimation of full-time equivalents. This implies a data break in the number of FTEs from 2008 to 2009. It is assed that this evolves to a fall of 2-3 pct. in full time equivalents.

For the reference year 2016, a technical revision of the income limit for the inclusion of self-employed persons gave approx. 3,200 more new firms from 2015 to 2016.

With the publication of the Statistics on business demography for the year 2018 the reference year 2017 was republished. This was due to quality-enhanced data processing, which resulted in an otherwise uncommon revision of Accounts Statistics for Non-Agricultural Private Sector and the General enterprise statistics. Republishing the business demography ensures that these are consistent. The revision only carries minor alterations to the reference year 2017.

Since 2009, the production of the business demography has used the same methodology to identify new and terminated enterprises. From the reference year 2020 a new method has been introduced. Where the old method is based on calculations of the number of employees in enterprises, the new method uses workplace moves of individual employees to determine whether an enterprise is actually new or terminated. The new method increases the possibility of identifying enterprises that are not actually new or terminated due to demography event (exchanges of employees) with other enterprises. A comparison of methods and data form 2019 shows that the new method identifies fewer new and terminated enterprises, 0.4 and 1.7 per cent fewer respectively. For new enterprise survival rates (table DEMO6) data have been recompiled back to 2010 to give the longest possible time series for survival using the new methodology.

7.3 Coherence - cross domain

Statistics Denmark also produce an entrepreneurship database. There is a difference between the two. In the entrepreneurship database it is not allowed for an enterprise to restart. In Business Demography this is allowed if the enterprise has been closed for at least two years.

7.4 Coherence - internal

The statistics are based mainly on one source, why the internal consistency is considered high.

8 Accessibility and clarity

Results are published in [Nyt fra Danmarks Statistik](). Results are also available in the StatBank under the topic [Business demography]().

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

Results are published in [Nyt fra Danmarks Statistik]() *Erhvervsdemografi*.

8.5 Publications

Results are published, among other places, in [Statistical Yearbook]() and [Statistical Yearbook]().

8.6 On-line database

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

- [DEMO1](): Business Demography by industry (DB07 127-grouping), status, unit and time
- [DEMO3](): Business Demography by industry (DB07 19 grouping), turnover and export and time
- [DEMO4](): Business Demography by region, industry (DB07 10-grouping), unit and time
- [DEMO5](): Business Demography by type of ownership, unit and time
- [DEMO6](): Business Demography by industry (DB07 10-grouping), unit, year of beginning and time
- [DEMO8](): Business Demography by enterprise size (full time equivalents), unit and time

- [DEMO9](): Business Demography by municipality, unit and time

- [FDEMO4](): Preliminary Business Demography by region, industry (DB07 10-grouping), unit and time

8.7 Micro-data access

Data is available on individual level. Researchers may be granted access to anonymised micro-data. Furthermore, specialized data sets and tables may be produced upon request.

8.8 Other

Anonymised data from the statistical register may be used for customized tables and analyses. See Customized solutions.

Inquiries may be directed to the person responsible for the Business Demography.

8.9 Confidentiality - policy

Statistics Denmark's policy on confidentiality.

8.10 Confidentiality - data treatment

In connection to publication and delivery of customized statistics, a so-called confidentiality test of data is made. The confidentiality test is made on the basis of two criteria:

1. The number criteria: If one data cell contains less than 3 observations (enterprises) employment and financial information can not be published
2. The dominance criteria: If one or two observations (enterprises) contained in one data cell, alone or together constitute a certain percentage of the total turnover of the cell, the turnover and other financial information for this group can not be published.

8.11 Documentation on methodology

See Eurostat-OECD Manual on Business Demography 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 are in the division of Business Dynamics. The person responsible is Kalle Emil Holst Hansen, tel. +45 39 17 35 65, e-mail: khs@dst.dk

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