

Documentation of statistics for SME Access to Finance 2018



1 Introduction

The statistics provides updated information on small and medium-sized enterprises' access to finance in light of the financial crisis. The 2018 statistics is an update of previous surveys covering the periods 2007, 2009/2010 and 2014. To provide the best basis for comparability over time, the survey has been repeated with an almost unchanged contents.

2 Statistical presentation

The statistics sheds light on small and medium-sized enterprises' access to finance, covering loan finance, equity finance and other types of finance. Results are published in a NYT from Statistics Denmark and related tables in the Statbank.

2.1 Data description

The statistics covers small and medium-sized enterprises' access to finance, specifically loan finance, equity finance and other types of finance. Results are produced by enterprise type of activity, by size class, and for subpopulations of high-growth enterprises, high-growth new enterprises and other enterprises.

2.2 Classification system

Results are produced for enterprises by type of activity, size class and for subpopulations of highgrowth enterprises, high-growth new enterprises and other enterprises. In addition, a distinction is made between enterprises that are owned by another enterprise, and enterprises that are not owned by another enterprise. The applied activity nomenclature is Danish Industrial Classification 2007 (DB07), internationally NACE Rev.2. Groups of high-growth enterprises, new high-growth enterprises and other enterprises was taken into account in both stratification for sample and raising data to total population level. New high-growth enterprises are enterprises that were new in 2012 or 2013, which had a growth in the number of employees of minimum 72,8 per cent in the period 2014-2017, and which had 5 or more employees in 2014. High-growth enterprises are enterprises that were not new in 2012 or 2013, but which otherwise meet the same criteria as the new high-growth enterprises. Enterprises not fulfilling the criteria are categorised as other enterprises.

2.3 Sector coverage

The survey covers private, non-financial enterprises, excluding primary activities such as agriculture, forestry and fishing, mining and quarrying.



2.4 Statistical concepts and definitions

Types of finance: The statistics distinguishes between three types of finance. Loan finance refers to debt that it so be paid back, covering for example loans from banks and mortgage-credit institutes or the owner(s) of a company. Equity finance refers to money or other assets given against part ownership or shares in the company. Other forms of finance include for example bank overdraft or credit line as well as leasing and trade credits (by suppliers).

Outcome of sought finance: The survey distinguishes between three outcomes from seeking to obtain finance: Fully obtained, partially obtained, and not obtained. By fully obtained is understood that the sought finance is obtained entirely and at the terms and conditions requested. By partially obtained is understood that the sought finance is not obtained entirely or obtained at the terms and conditions different from those requested. By not obtained is understood that finance is not obtained.

2.5 Statistical unit

Enterprise.

2.6 Statistical population

The target population is small and medium-sized enterprises, specifically enterprises with 5 to 249 employees in 2014 which had 5 or more employees at the end of 2017. The population is further defined as private, market-based enterprises within selected industries (NACE Rev.2 sections B, C, D, E, F, G, H, I, J, L, M and N).

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics refers to 2018 and is an ad hoc survey. Survey covering the periods 2007, 2009/2010 and 2014 have previously been carried out.

2.9 Base period

Not relevant for this statistics.

2.10 Unit of measure

Per cent of enterprises.

2.11 Reference period

01-01-2018 - 31-12-2018



2.12 Frequency of dissemination

The statistics is an annual statistics referring to 2018. Surveys covering the periods 2007, 2009/2010 and 2014 have previously been carried out.

2.13 Legal acts and other agreements

Act on Statistics Denmark (Lov om Danmarks Statistik). The survey for 2007 and 2009/2010 was carried out as part of a European survey under the flexible module of the regulation on structural business statistics, Commission Regulation no. 97/2009 of February 2, 2009.

2.14 Cost and burden

The respondent burden has not been calculated. The survey is a mandatory ad hoc survey with relatively few, qualitative questions.

2.15 Comment

SME Access to finance

3 Statistical processing

The statistics is annual and questionnaire-based. Information is reported digitally. Validation includes checks and supporting information built into the digital form, combined with subsequent checks and recontact to reporting enterprises. The published results are grossed up to population level. Stratification is based on activity, enterprise size class and subpopulations (high-growth enterprises, high-growth new enterprises and other enterprises).

3.1 Source data

The survey is questionnaire based.

3.2 Frequency of data collection

The statistics is an annual statistics referring to 2018. Surveys covering the periods 2007, 2009/2010 and 2014 have previously been carried out.

3.3 Data collection

Online survey



3.4 Data validation

A number of checks and validation mechanisms are built into the digital questionnaire. This includes filter and routing (e.g. so that information cannot be reported in fields, where the enterprise should not provide any information). Once data is received by Statistics Denmark a number of additional checks are performed. These include logical controls and correction of logical inconsistencies (for example, if an enterprises has not sought to obtain loan finance and states that this is due to no need for finance, but the enterprise later in the questionnaire then states that it has sought to obtain other forms of finance). In addition, reporting enterprises have the opportunity to provide supplementary or explanatory remarks in the digital form. All remarks have been read and taken into account for possibly correcting the provided information. Finally, information on ownership of the enterprise has been treated trough linking with Statistics Denmark's register on enterprise groups in Denmark, combined with information from the Danish central business register (CVR-register), annual reports etc. For enterprises found not to be owned by another active enterprise or belonging to a group of enterprises not containing at least one other active enterprise, the enterprise is recorded as not being owned by another enterprise.

3.5 Data compilation

The published results are raised to the level of the population. A stratified random sampling is used on the basis of the activity of the enterprise, size class (the number of employees) and subpopulation. By grossing up a reweighting and calibration using regression techniques is applied to the weight of the individual enterprise. Imputation is not used, neither in the case of partially lacking information in the individual record (item non-response), nor in the case of completely lacking reporting from an enterprise (unit non-response). The latter, instead, is handling through reweighting as part of the grossing up procedure.

3.6 Adjustment

No further corrections are undertaken than those already described under validation and treatment.

4 Relevance

The statistics provides updated information on growth conditions for the Danish business sector, specifically on small and medium-sized enterprises' access to finance. The 2018 survey was carried out in collaboration with, and with financing from, the Danish Ministry of Industry, Business and Financial Affairs. In addition, the statistics is expected to be used by other ministries, Danmarks Nationalbank (the Danish Central Bank), business associations and by researchers.

4.1 User Needs

The statistics provides updated information on growth conditions for the Danish business sector, specifically on small and medium-sized enterprises' access to finance. The 2018 survey was carried out in collaboration with, and with financing from, the Danish Ministry of Industry, Business and Financial Affairs. In addition, the statistics is expected to be used by other ministries, Danmarks Nationalbank (the Danish Central Bank), business associations and by researchers.

4.2 User Satisfaction

No user satisfaction survey has been carried out.



4.3 Data completeness rate

Results are published in a Nyt from Statistics Denmark and related tables in the Statbank.

5 Accuracy and reliability

Sampling error calculations have been produced. The response rate is 93 per cent. Unit non-response is limited and due to bankruptcy, take-overs, etc. Item non-response is also limited. The quality of the statistics is considered high.

5.1 Overall accuracy

Sampling error calculations have been produced. The response rate is 93 per cent. Unit non-response is limited and due to bankruptcy, take-overs, etc. Item non-response is also limited. The quality of the statistics is considered high.

5.2 Sampling error

Sampling error (2018, all enterprises)

Variable: estimated share (coefficient of variance, cv) \cdot Enterprises seeking to obtain loan finance: 12,9 (5,9) \cdot Enterprises seeking to obtain equity finance: 3,0 (12,7) \cdot Enterprises seeking to obtain other types of finance: 23,3 (4,2)

The coefficient of variance (cv) shows relative error, that is the standard deviation divided by the estimate, and is therefore without unit. That means, the higher the cv value, the greater the spread in relation to the estimate, and a higher cv value thus means a higher uncertainty. The relatively high coefficient of variance for equity finance stems from the fact that relatively few enterprises sought to obtain this type of finance.

Uncertainty is higher when breaking down by activity or size class.

5.3 Non-sampling error

Uncertainty relates to non-response, and this is limited in scale. The response rate is high (93), and the scale of item non-response is considered limited.

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 2018 statistics is based on 3878 observations representing a population of 21385 enterprises. The response rate is 93 per cent. Unit non-response is limited and due to bankruptcy, take-overs, etc. Item non-response is also limited. The published results are raised to the level of the population. A stratified random sampling is used on the basis of the activity of the enterprise, size class (the number of employees) and subpopulation. By grossing up a reweighting and calibration using regression techniques is applied to the weight of the individual enterprise. Imputation is not used, neither in the case of partially lacking information in the individual record (item non-response), nor in the case of completely lacking reporting from an enterprise (unit non-response). The latter, instead, is handling through reweighting as part of the grossing up procedure. The quality of the statistics is considered 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

Not relevant for this statistics.

6 Timeliness and punctuality

Results from the survey are published relatively soon after the end of the reference period, and results have been published without delays. Results for 2014 were published without delays in a NYT from Statistics Denmark and related tables in the Statbank in mid-April 2015. Results for 2018 will be published without delays in late October 2019.

6.1 Timeliness and time lag - final results

Results for 2014 were published in a NYT from Statistics Denmark and related tables in the Statbank in mid-April 2015, i.e. 3¹/₂ months after the end of the reference period. Results for 2018 will be published late October 2019. The production time for the two surveys is the same, the difference in publication time being due to the time of initiating the survey process. No preliminary results are published.



6.2 Punctuality

Published as announced.

7 Comparability

The statistics provides updated information on small and medium-sized enterprises' access to finance in light of the financial crisis. The 2018 statistics is an update of previous surveys covering the periods 2007, 2009/2010 and 2014. for 2007 and 2009/2010 results for a number of other European Member States are also available. To provide the best basis for comparability over time, the survey has been repeated with an almost unchanged contents.

7.1 Comparability - geographical

The survey covering the periods 2007 and 2009/2010 was carried out in 2010 as part of a larger, European survey on SME access to finance. For these periods, international results are available. The subsequent surveys for 2014 and 2018 were not part of a larger European survey, so comparative results are not available for these.

7.2 Comparability over time

To provide the best basis for comparability over time, the survey has been repeated with an almost unchanged contents.

7.3 Coherence - cross domain

Danmarks Nationalbank (the Danish Central Bank) produces a quarterly lending survey, collecting information from the largest banks and mortgage banks in Denmark, i.e. the banks in the Danish Financial Supervisory Authority's groups 1 and 2 as well as the five largest mortgage banks. The corporate sector part of the survey covers 1) changes in the institutions' credit policy; 2) factors contributing to changes in the credit policy; 3) changes in the institutions' credit conditions and terms; 4) changes in loan demand from respectively new and existing customers; and 5) changes in default rates and losses given default.

7.4 Coherence - internal

Internal consistency in the data is good. A number of checks and validation mechanisms are built into the digital questionnaire. This includes filter and routing (e.g. so that information cannot be reported in fields, where the enterprise should not provide any information). Once data is received by Statistics Denmark a number of additional checks are performed. These include logical controls and correction of logical inconsistencies (for example, if an enterprises has not sought to obtain loan finance and states that this is due to no need for finance, but the enterprise later in the questionnaire then states that it has sought to obtain other forms of finance). In addition, reporting enterprises have the opportunity to provide supplementary or explanatory remarks in the digital form. All remarks have been read and taken into account for possibly correcting the provided information.



8 Accessibility and clarity

Results are published in a Nyt from Statistics Denmark (in Danish only) and related tables in the Statbank.

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: <u>Release Calender</u>.

8.4 News release

Results are published in a NYT from Statistics Denmark and related tables in the Statbank.

8.5 Publications

Not relevant for these statistics.

8.6 On-line database

The statistics are published in the StatBank under the subject <u>Business demography</u> in the following tables:

- <u>ATF1</u>: Enterprises seeking to obtain finance by industry (DB07), finance activity, population and time
- <u>ATF2</u>: Enterprises seeking to obtain finance by type of finance, outcome, population and time
- <u>ATF3</u>: Enterprises seeking to obtain finance by source of loan finance, outcome, population and time

8.7 Micro-data access

Access to anonymised micro data may be granted under the rules for research access.

8.8 Other

No remarks.

8.9 Confidentiality - policy

See Statistics Denmark's policy on confidentiality.

8.10 Confidentiality - data treatment

Results are only published at a level of aggregation where cell contents may be released.

8.11 Documentation on methodology

Not relevant for this 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. The contact person is Alina Grecu, tel.: + 45 3055 1824, and e-mail: AGC@dst.dk.