

Documentation of statistics for Census of Buildings 2019



# **1** Introduction

The statistics yearly describe the stock of buildings in Denmark. The Census of buildings - together with the Census of Housing - is since 1981 and based on administrative registers a continuing of the questionnaire based Census on Population and Housing.

# **2** Statistical presentation

The statistics are compiled from a full-scale census, 1st January. Before 2011 are small buildings (e.g. garages, carports, outhouses) excluded from the stock. The statistics describe the stock of buildings analyzed by type of use, size, ownership, heating installation, roof covering and external cladding materials, water and effluent installations, and year of construction. The statistic is used by municipals, ministries, the press, companies and private people.

# 2.1 Data description

The Central Register of Buildings and Dwellings consists of a register on building permits, new buildings, extensions and alterations and a register on buildings with building inspectors' certificate. The Central Register of Buildings and Dwellings was established in 1977 (Act No. 243 of May 12, 1976). The purpose was to make coherent registrations of building and dwelling conditions for public planning and administration. The main purposes were the public tax assessment of real property and the population and housing census. For mainly municipal uses, several other purposes have later been added to the use of the register.

The Census of Buildings are compiled from a full-scale census, 1st January. Small buildings (e.g. garages, carports, outhouses) are excluded from the stock. It describes the stock of buildings analyzed by type of use, size, ownership, heating installation, roof covering and external cladding materials, water and effluent installations, and year of construction.

# 2.2 Classification system

Geographically there are the following divisions

- Regions: Figures can be divided into 5 regions
- Provinces: Figures can be divided into 11 provinces
- Municipalalities: Figures can be divided into 98 municipalities

Data can be divided into 5 ownership types. The types are an aggregated version of the variable ownership described in Danish <u>here</u>.

Data can be divided into the different values of the variable use. The variable is described in Danish <u>here</u>.

# 2.3 Sector coverage

The construction sector.



# 2.4 Statistical concepts and definitions

Ownership: Read about ownership here.

Use: Read about use <u>here</u>.

# 2.5 Statistical unit

The statistical unit is buildings.

# 2.6 Statistical population

The population is comprised of all buildings registered in The Central Register of Buildings and Dwellings, except for small buildings (e.g. garages, carports, outhouses) before 2011.

# 2.7 Reference area

The statistic covers buildings in Denmark.

# 2.8 Time coverage

The statistic covers the period of 2011 and onward.

# 2.9 Base period

Not relevant for this statistics.

# 2.10 Unit of measure

Number of buildings and 1.000 square meters.

# 2.11 Reference period

The reference period is 1st January.

# 2.12 Frequency of dissemination

Yearly.

# 2.13 Legal acts and other agreements

Acts on Statistics Denmark.



# 2.14 Cost and burden

There is no response burden.

# 2.15 Comment

Census of buildings has a subject page.

# **3 Statistical processing**

Data is validated at the building level. The aggregated numbers are checked against earlier years.

### 3.1 Source data

The data used in the statistic is from The Central Register of Buildings and Dwellings.

#### 3.2 Frequency of data collection

Yearly.

#### 3.3 Data collection

The data is from The Central Register of Buildings and Dwellings.

#### 3.4 Data validation

Data is validated at the building level. The aggregated numbers are checked against earlier years.

# 3.5 Data compilation

Data is aggregated.

#### 3.6 Adjustment

There are no other adjustments made, except from the ones mentioned in Data validation and Data compilation.

# 4 Relevance

The statistic is used by municipalities, counties, government departments, private and semi- private organizations and firms, the news media and private persons. It is used for public and private planning, education and public debate.



# 4.1 User Needs

The statistic is used by municipalities, counties, government departments, private and semi- private organizations and firms, the news media and private persons. It is used for public and private planning, education and public debate.

# 4.2 User Satisfaction

The users are generally satisfied with the statistic.

# 4.3 Data completeness rate

The data published is complete.

# 5 Accuracy and reliability

The quality of the statistic is believed to be high. A survey of the overall accuracy of the Central Register of Buildings and Dwellings has never been conducted. But the degree of unknown variables is small.

# 5.1 Overall accuracy

A survey of the overall accuracy of the Central Register of Buildings and Dwellings has never been conducted. But the degree of unknown variables is small. According to the rules and regulations laid down by the Ministry of Economics and Business Affairs, public authorities and owners of buildings are asked to provide information for maintaining the register. Owners are obliged to ensure that real and actual figures are continuously supplied. At the same time, the extensive administrative use of the register by the municipalities also insures a high data quality.

The Central Register of Buildings and Dwellings Register was established in 1977 by compiling information collected from owners of real property. Figures on living space and time of construction for older buildings may be subject to errors. Especially in cases where the building has not later been involved in an administrative building or development case. This is, of course, due to the lack of accurate data by the owners as far back as 1977. According to the rules and regulations laid down by the Ministry of Economics and Business Affairs, public authorities and owners of buildings are asked to provide information for maintaining the register. Owners are obliged to ensure that real and actual figures are continuously supplied. At the same time, the extensive administrative use of the register by the municipalities also insures a high data quality.

# 5.2 Sampling error

Not relevant for this statistics.

#### 5.3 Non-sampling error

Not estimated. But experience says that the quality of data on the central variables, which are the use of building, areas and ownership, generally are good.



# 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 quality of the statistic is believed to be high. The Central Register of Buildings and Dwellings Register was established in 1977 by compiling information collected from owners of real property. Figures on living space and time of construction for older buildings may be subject to errors. Especially in cases where the building has not later been involved in an administrative building or development case. This is, of course, due to the lack of accurate data by the owners as far back as 1977. A survey of the overall accuracy of the Central Register of Buildings and Dwellings has never been conducted. But the degree of unknown variables is small. According to the rules and regulations laid down by the Ministry of Economics and Business Affairs, public authorities and owners of buildings are asked to provide information for maintaining the register. Owners are obliged to ensure that real and actual figures are continuously supplied. At the same time, the extensive administrative use of the register by the municipalities also insures a high data quality.

# 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

Only final statistics are published.

# 6 Timeliness and punctuality

The statistic is published medio July, normally on time.

# 6.1 Timeliness and time lag - final results

The statistic is published approximately 2-3 months after the reference period.



# 6.2 Punctuality

Usually no delays.

# 7 Comparability

With some exceptions the data are consistent back to January 1, 1986(see comparability over time). A complete comparability with the statistic of constructions is, for several reasons, not possible:

# 7.1 Comparability - geographical

There are not carried out any international comparisons with corresponding statistics, among other things because many other countries do not have a corresponding statistics.

# 7.2 Comparability over time

To make statistics on the stock of buildings was made possible when the Central Register of Buildings and Dwellings Register was established, April 1, 1977. Statistics Denmark published statistics on the stock of buildings April 1, 1977 and January 1, 1981. From January 1, 1986 Statistic Denmark has produced figures every year.

With the following exception the data are consistent back to January 1, 1986: - From 1981-1987 the type of ownership was not maintained by linking data with the Real Property Taxation Register, but only due to the municipal administration of building and development cases. - Before 1st of January 2005 the statistics do not include buildings where a buildings dwelling and industrial area together differs more than 10 square meters from the buildings total area.

- From 2001 the Census of Buildings also include "small buildings" (garages, carports and outhouses).

# 7.3 Coherence - cross domain

A complete comparability with the statistic of constructions is, for several reasons, not possible: The statistics on the buildings stocks contain information on the number of buildings and the total building space January 1, indicating knowing the construction year of the buildings. The difference in the number of buildings and total building space between two years is a net figure (new construction and demolitions). The statistics on constructions give a gross figure for the number of new buildings and their total buildings space. Furthermore, if no building permit has been obtained, changes in information, e.g. between occupations for residence or non-residence, is undertaken directly in the stock of buildings.

# 7.4 Coherence - internal

There are no sources of internal inconsistencies.

# 8 Accessibility and clarity

The newest numbers are published at [STATBANK] https://www.dst.dk/en/Statistik/emner/byggeri-og-anlaeg/bygninger.aspx). The numbers are also used 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 newest numbers are published at **STATBANK**.

#### **8.5 Publications**

The numbers are used in the Statistical Yearbook.

#### 8.6 On-line database

All numbers are published in Statbank Denmark. http://www.Statbank.dk/bygb12 http://www.Statbank.dk/bygb34 http://www.Statbank.dk/bygb40 http://www.Statbank.dk/bygb50 http://www.Statbank.dk/bygb60

#### 8.7 Micro-data access

There is no access to micro-data.

#### 8.8 Other

There is no other dissemination done.

# 8.9 Confidentiality - policy

In the process of making the statistic Employment in the construction industry, The Danish Statistics data confidentiality policy is followed. In praxis this means that only aggregated numbers are published.

# 8.10 Confidentiality - data treatment

In the process of making the statistic Employment in the construction industry, The Danish Statistics data confidentiality policy is followed. In praxis this means that only aggregated numbers are published.



### 8.11 Documentation on methodology

The variables and recordlayout are documented in Danish in the TIMES database established by Statistics Denmark. The documentation is, however, only available in Danish and can be found on http://www.dst.dk under "dokumentation". Documentation for each dwelling variable is also given in a Danish manual "BBR instruks" (only available in Danish) prepared by the National Survey and Cadastre. The manual can be found on the following website (National Agency for Enterprise and Construction) http://www.ebst.dk under "Bolig", "BBR", "BBR-loven".

# 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 Thomas Eisler, tel. + 45 3917 3249, e-mail: tme@dst.dk

#### 9.1 Contact organisation

Statistics Denmark

#### 9.2 Contact organisation unit

Short term statistics, Business statistics

#### 9.3 Contact name

Thomas Eisler

#### 9.4 Contact person function

Responsible for the statistics

# 9.5 Contact mail address

Sejrøgade 11, 2100 Copenhagen

#### 9.6 Contact email address

tme@dst.dk

#### 9.7 Contact phone number

+45 3917 3249

# 9.8 Contact fax number

+45 39 17 39 99