STATISTICS DENMARK

Documentation of statistics for Census of Housing 2024

Statistics Denmark
Sankt Kjelds Plads 11
DK 2100 København Ø

STATISTICS DENMARK

1 Introduction

The purpose of the housing statistics is to analyze the total housing stock and population housing. The statistics is used in the municipal equalization system. The housing statistics has been conducted annually since 1981. The statistics is comparable from 2010 onwards.

2 Statistical presentation

The statistics are produced on a yearly basis and comprises all homes in Denmark. The statistics and is described through a number of variables; type of dwelling, type of ownership, type of heating installation, toilet, bathing, and kitchen facilities plus the year of construction and also the stock of occupied dwellings by tenure (rented or owner-occupied dwellings) type of household etc. In addition, the number of persons in dwellings by age and gender and number of children. The statistics are also geographically distributed by municipalities, regions and provinces.

2.1 Data description

The Census of Housing describe the stock of dwellings and the housing condition of the population. The information is based on data from The Register of Buildings and Dwellings (BBR).

The statistics on dwellings includes region, year of construction, toilet, bathing, and kitchen facilities, type of heating, type of dwelling, type of ownership and tenure. The dwellings are grouped into dwellings with and without registered population and cottages without registered population. Dwellings with registered population is also published by type of household and number of persons in the household. There are also statistics on the average size of dwellings (square meters), average size per person (square meters) and average number of persons per dwelling.

The above mentioned variables are also published for persons in dwellings. Persons in dwellings are also broken down by age and sex.

2.2 Classification system

In the Census of Housing dwellings and cottages are split in: 1. - Dwellings with registered population (occupied dwellings) which are units in BBR (register on buildings and dwellings), where there in CPR are at least one person registered on the address* of the unit at the reference time. This therefore includes proper dwellings as well as units classified for other purposes 1. - Dwellings without registered population (unoccupied dwellings) are units in the BBR classified as proper dwelling, mixed dwelling and business or single rooms, where there are no persons registered at the address in CPR at the reference time 1. - Cottages without registered population (unoccupied cottages) are units in the BBR classified as cottages where there are no persons registered at the address in CPR at the reference time. Cottages are most often not used as registered address in the CPR

- See description of match between BBR- and CPR-addresses under 'Data compilation' and 'Quality assessment'

Use of the dwelling is split on the basis of BBR-codes: 1. Detached houses/farmhouses (110,120) 1. Terraced, linked or semi-detached houses (130 vertical separation between units) 1. Multi-dwelling houses (140 horizontal separation between units) 1. Student hostels (150) 1. Residential buildings for communities (160) 1. Cottages (510, 540, 590) 1. Other uses (other BBR-codes)

(Note that residential buildings for communities and student hostels do not reflect the real number of dwellings with these uses)

The classification of the ownership of the units is based on BBR-codes: 1. Individuals inclusive partnerships (10) 1. Non-profit building society (20) 1. Limited liability company etc. (30) 1. Housing societies (41) 1. Public authorities (50,60,70,80 same municipality, other municipality, state, region) 1. Other or unknown (0,40,90 Unknown, union, independent institution, other ownership)

There has been problems with the quality of the ownership-data in certain years. See description under 'Quality assessment'

Geography: Regions (5), Provinces (11) and Municipalities (98)

The statistics can also be shown by tenure, year of construction, toilet-, bathing- and kitchen facilities, size of household, type of household, size of dwelling and age and sex of the occupants.

2.3 Sector coverage

Not applicable.

2.4 Statistical concepts and definitions

Dwelling: A dwelling is defined as a unit in the BBR with own address that has either a use classified as proper dwelling, mixed dwelling and business or single room or that at least one person has address in the CPR at the time of reference at the address of the unit. See more technical description under 'Data compilation'

Area of dwelling: The area of the dwelling includes the area of all living space including kitchen, bath, toilet and utilized attic. Basement area is included if it legally may be used for residential purposes. The area is measured from the outer side of the outer walls and includes in multi-dwelling houses also the share of stairwell area associated with the dwelling.

Dwelling with registered population (occupied dwelling): A dwelling with registered population has in the CPR at least one person with address in the dwelling at the time of reference. A business unit can count as a dwelling with registered population if a person has his address at the unit. See a more technical description under 'Data compilation'

Dwelling without registered population (unoccupied dwelling): A dwelling is a without registered population if the BBR-unit is classified as proper dwelling, mixed dwelling and business or single room and there is no person registered in the CPR at the address at the time of reference. Residential buildings for communities and cottages with no persons registered is not counted as dwelling without registered population. A part of the dwellings are unoccupied only for a short time in connection to relocations, some are used as cottages, while other are genuinely vacant.

Type of household: In the Census of Housing is used the same definition of households as in the general population statistics for most dwellings. Here households are split in single men, single women, married couples, other couples, children below 18 years not living with parents, other households including more than one family. There is though one more category 'More than one household within the home' in the Census of Housing. This is because some dwellings in the BBR is not split into sufficient number of units to match the CPR-addresses at the same floor. This is the case for some residential dwellings for communities etc.

Children: In the Census of Housing are only children living with parent counted. Children are defined as persons under the age of 25 living with one or both parents, who are not part of a couple and do not have children themselves.

Owner occupied dwelling: A dwelling occupied by owner and which is owned by individuals inclusive partnerships

Cottage without registered population (unoccupied cottage): An cottage without registered population is a unit in the BBR classified as cottage where there are no persons registered at the address in CPR at the time of reference

2.5 Statistical unit

Number of dwellings and number of residents.

2.6 Statistical population

Dwellings in Denmark and their occupants.

STATISTICS DENMARK

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics cover the time period from 2010 onwards.

2.9 Base period

Not applicable.

2.10 Unit of measure

Number of dwellings

Number of persons

Size of dwelling in square meters

2.11 Reference period

The reference period is 1st January.

Late registrations of population data in the CPR up to 30 days after January 1st, are taken into account. Data from the Central Register of Buildings and Dwellings are drawn per 15. January.

2.12 Frequency of dissemination

Yearly.

2.13 Legal acts and other agreements

Act on Statistics Denmark nr 599 of June 22, 2000.

2.14 Cost and burden

The statistics is based on administrative registers. There are no response burden.

2.15 Comment

Other information can be given on request.

STATISTICS DENMARK

3 Statistical processing

BBR- and CPR-data are matched via addresses and dwellings are split into dwellings with and without registered population. Inconsistencies are corrected and data summed.

3.1 Source data

The Central Register of Buildings and Dwellings (BBR) and the Central Population Register (CPR). The Central Register of Buildings and Dwellings was established in 1977 (Act No. 243 of May 12, 1976). The purpose of the register is, through arrangements made by the local authorities, to provide for the systematic registration of information relating to buildings and dwellings for use in the administration and planning of both central and local government. The main purposes were primarily property assessment and the population and housing censuses. Several other purposes, mainly for municipalities, have later been added to the use of the register.

3.2 Frequency of data collection

Quarterly.

3.3 Data collection

Registers.

3.4 Data validation

Only BBR-units, which can be placed in a building, are included. (Buildings owned by the military is due to confidentiality not included in the census ex. all units at Christiansø)

CPR-addresses are 'cleaned' to match BBR-addresses. Only door numbers are changed, so if it contain letters they will be prefixed. Ex. '0tv9' is changed to 'tv09'. Less than 100 addresses are changed.

Inconsistencies between tenure, ownership and the result of the match between BBR- and CPR-addresses (dwellings with registered population) are corrected. Less than 1 pct. of the dwellings get another tenure (to either unknown or unoccupied)

3.5 Data compilation

Input data from the BBR and CPR-register are available i databases in Statistics Denmark. Data compilation consists mainly of matching data from these two databases via the addresses.

The address match includes:

A. More than one unit are placed on some addresses in BBR. One unit is chosen to represent the dwelling. In order of priority is:

1. Only one dwelling unit (dwelling type 1-5, ie. only one unit with dwelling area)
2. Only one proper dwelling (dwelling type 1)
3. The unit with the largest dwelling area

B. If there at the floor level is only one address in the BBR but more than one in CPR, all CPR-households will be placed in the BBR-unit. This is the case in some residential buildings for communities.

C. CPR- and BBR-addresses are matched and the vast majority of the addresses are matched one CPR-address to one BBR-address with only one unit (dwelling).

D. CPR-addresses, that do not match a BBR-address, is then placed in an empty unit at the same floor, if available.

E. CPR-addresses still not placed in a BBR-unit is then placed in an empty unit at the same staircase, if available.

Match on same floor or staircase (D and E) are reused from quarter to quarter, so if a household does not change address i CPR, it will also be placed in the same BBR-dwelling next quarter, if no new address in BBR is matching 100 percent. This means that the match will be reused between quarters and households are not technically moved between dwellings.

Inconsistencies between residential status, ownership and tenure are corrected. Tenure is supplied with the BBR-delivery. It is constructed on basis of match between the BBR, CPR and the ESR (joint Municipal property register. If the owner(s) of a property at the time of the match has his address in CPR at a dwelling within this property, this dwelling has tenure as occupied by the owner. Residents in Housing societies are in this context renters as it is the Housing society which owns the dwellings. Are there no residents at an address, the dwelling has the tenure 'Unoccupied'. Tenure is corrected in the Census of Housing so there are no no inconsistencies between ownership, residential status and tenure.

3.6 Adjustment

No adjustments are made besides what is already mentioned at 3.4 and 3.5

4 Relevance

Census of Housing is used by ministries, municipalities, companies and private persons.

4.1 User Needs

- Users: Municipalities, counties, government departments, private and semi- private organizations, firms, the news media and private persons.
- Application: Public and private planning, education and public debate.

4.2 User Satisfaction

User satisfaction is only measured in relation to tailor made solutions. Here the user satisfaction is generally high.

4.3 Data completeness rate

Not applicable

5 Accuracy and reliability

The degree of uninformed information for each variable is very little. Close cooperation between the BBR-authority and the Population Register in each municipality ensures a good match between the addresses in the two registers.

All property owners are obliged by law to notify changes such as extensions, demolitions or a new roof to the municipal BBR-authority. It is up to the homeowners to update information in BBR themselves, so it is doubtful that changes, for example in the number of rooms, toilet / bathroom conditions or change of heating are always notified BBR.

5.1 Overall accuracy

The degree of unknown variables is very small. According to the rules and regulations laid down by the Ministry of Economics and Business Affairs, public authorities and owners of buildings and dwellings are asked to provide information for maintaining the register. Owners are obliged to ensure that real and actual figures are continuously supplied. The main source of uncertainty is that there are lacks in reporting. The deficiencies are caused by ignorance, neglect, forgetfulness or otherwise. For example, it is uncertain to what extent the citizen reports a change in the number of rooms when a remodeling or heat source is changed.

Quality and accuracy of information in the BBR:

Ownership: Before 2010 ownership information was not available for owner-occupied flats (se definition). In 2012 and 2013 there was a problem obtaining correct ownership on dwellings especially those owned by non-profit building societies and housing societies. This was caused by the Land Registration being digitized.

Use: The number of dwellings with the use as residential buildings for communities are not at all representative of the total number of dwellings for this purpose. These dwellings will most often be placed with use as terraced, linked or semi-detached houses or multi-dwelling houses.

The Central Register of Buildings and Dwellings 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.

The accuracy of the Central Population Register is known to be very high. A close co-operation between the municipal authorities of the Central Register of Buildings and Dwellings and the Central Population Register ensures a high consistency between the addresses of the two registers.

The vast majority of CPR-addresses - 96.1 pct. (1. January 2024) are matched perfect to a BBR-address with only one unit associated.

- 99.7 pct. of the CPR-addresses are matched completely to an address in BBR.
- 0.1 pct. of the CPR-addresses are matched to an empty dwelling at the same floor or same staircase.
- 0.02 pct. of the CPR-addresses are aggregated with one or more CPR-addresses at the same floor
- 0.2 pct. of the CPR-addresses find no dwelling in the BBR. These includes households on secret addresses and other not physical addresses ie. homeless, few allotment houses, houseboats and possibly new not yet completed dwellings.
- 0.5 pct. of the population do not find a dwelling in the BBR-register.

Match of addresses on floor or stairway-level are considered as giving a good result at the overall level, but are not necessarily correct at the record level.

The number of unoccupied dwellings is very dependant on correct registration of units being registered and especially deregistered, when they are no longer available as dwellings.

5.2 Sampling error

Not applicable

5.3 Non-sampling error

Only a very small share of the population cannot be placed in a dwelling. In 2024 there are 28.000 people who do not match. One reason seems to be that the addresses in the CPR are not always updated. Furthermore, only the BBR units that can be placed in a building are included. Military-owned buildings are discretionary in the BBR, so the associated units are not included in the dwelling statistics. For example, all units on Christiansø are discretionary. There are also households at secret addresses and other non-physical addresses (eg homeless), some garden association houses, houseboats and possibly. new housing that has not yet been completed.

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

No real measure of quality is performed on the information in the Census of Housing. The vast majority of population is placed in a dwelling and the information in the BBR are considered reasonable. Most homeowners are not aware of the obligation to update the information in the BBR.

Known errors in the Census of Housing are:

-Problems getting correct ownership codes for the dwellings, especially in 2012 and 2013. Especially the number of dwellings owned by Non-profit building societies is too low (3-4 pct. in 2012) -Most of the residential buildings for communities are no longer registered with use as residential buildings for communities at the dwellings level. Since 2000 most of the Municipalities has changed the registration of the use of these dwellings which means that by 2014 there has been a 70 pct. decline in the number of these dwellings.
- The Municipality of Frederiksberg has registered far to many dwellings owned by non-profit building societies (25-30 pct.) in 2010-2015 - The Municipality of Svendborg had in 2010 error in tenure on approx. 20.000 dwellings, ie. 75 pct. of their dwellings. This has implications for the country total. - Some unoccupied student hostel dwellings in Copenhagen have been unoccupied since 2010, which means that these units probably are not used for this purpose anymore. - Some vacation rentals are in the BBR registered with use as as proper dwelling, which means that they in the census are counted as unoccupied dwellings. - It is not possible to obtain information about tenure status in 2021 and 2022.

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

Only final statistics are published.

6 Timeliness and punctuality

Data is released timely around 4-6 month after the reference period. The statistics are published without delay in relation to scheduled release times.

6.1 Timeliness and time lag - final results

The production time is estimated to 4-6 months after the reference period.

6.2 Punctuality

The statistics are published without delay in relation to the pre-announced release date in the release calendar.

7 Comparability

Then Census of Housing has been based on the BBR and CPR-registers since 1. January 1981. With the exceptions of a few variables the data are consistent from 1981. There are though certain reservations for comparison during this time period.

7.1 Comparability - geographical

Census of Housings is internationally most often compared with Censuses of dwellings based on questionnaires. In these comparisons, we have problems identifying institutional dwellings.

7.2 Comparability over time

The questionnaire based population and dwelling census included only the occupied dwellings (households), while the current statistics also contain information on non-occupied dwellings. The dwelling statistics has been calculated based on BBR and CPR dating back to January 1, 1981. Many variables have had the same linguistic content throughout the period, but there are certain reservations for comparisons over the time:

From 1. January 1988 a monthly update of the ownership via the ESR was performed and later the update has been performed three times a year of which the last one is performed in week 51.

From 2010 also ownership of owner-occupied flats is available (see definition), which means that the number of dwellings with all ownership categories rises. In 2012 and 2013 there was a problem obtaining correct ownership on dwellings. These errors are corrected in the 2014-data. There are

still however, too few dwellings owned by non-profit building societies in some municipalities. In 2010-2015, far too many dwellings owned by non-profit building societies where registered in the Municipality of Frederiksberg.

Until 1992, persons under 26 years living with their parents, were counted as children. From 1992 to 2006 this age limit was 18. Since 2007 youngsters under 25 years living with their parents/parent are counted as part of the parents family. In the early 1980s, there was a significant change in the road codes in the municipalities, which led to a problem of following the same physical address all the way back to 1981. A changed road code would thus be perceived as a move of the person, although this has not physically been done. This could in some cases result in a double count of dwellings.

Prior to 2005, housing was generally divided into "proper dwellings " and "other dwellings". Proper dwellings are dwellings intended for year-round housing. Other dwellings consists of holiday homes and residential buildings for communities. As of 2005, a dwelling is defined as part of one or more buildings for which there is an independent address and which is intended for or used as a housing at the reference time. Holiday homes inhabited at the time of reference are included as housing, but holiday homes without CPR registration are not included in the housing statistics in the years 2005-2009 / 2010.

In the period 2005-2010 the BBR-amendment register was used for collecting information on not yet completed dwellings, where persons according to the CPR already had their address.

The reporting and structure of BBR data changed during 2010. In addition, efforts have been made to improve the match between BBR and CPR addresses in order to reduce the number of people without housing. Data for 2010 is calculated using both 'old' and new method. Summarized here are the main changes:

- Number of unoccupied dwellings is reduced by almost 23.000 dwellings of which 3.900 were unoccupied residential buildings for communities that are not considered as dwellings.
- Data for cottages not used for permanent living is now included.
- More people are linked to dwellings. This is partly because there, in some dwellings, are placed more than one household.
- Ownership of owner-occupied flats are now available. This category is not part of the ownership variable anymore and the numbers in the other categories has therefore increased.

In 2017, BBR was rearranged to a completely new register. In this connection, significant implementation problems have emerged. A completely new data structure has been introduced, which Statistics Denmark has not received a total documentation of. Further, a new set of codes has been introduced. It has not been possible to generate 2017 figures based on the new BBR reports. Therefore, the new method/new reporting cannot be distinguished from the underlying trend in the housing stock between 2017 and 2018. In connection with this, the number of people who cannot be matched to a home has risen from 28 000 to 33 000. One reason seems to be being that the addresses in the CPR are not always updated.

7.3 Coherence - cross domain

Because the housing census uses the Central Population Register as a data source, there is a nearly complete consistency with statistics on population and statistics on households.

However, the consistency with the statistic on constructions is, for several reasons, somewhat lower:

- The housing census counts the number of dwellings on January 1, indicating the construction year of the dwellings. The difference in the number of dwellings between two years is a net figure (registration and deregistration). The statistics on constructions give a gross figure for the number of new dwellings.
- Because of the municipal administration, it is not possible to make figures for combined, divided and demolished dwellings.
- Changes in information, e.g. between occupations for residence or non-residence is undertaken directly in that part of the Central Register of Buildings and Dwellings keeping the existing buildings and dwellings.-
- One major problem involved in compiling the statistics on constructions concerns delays.
- The definition of a dwelling differs between the two statistics. In the construction statistics a dwelling is a unit reported as a dwelling by the administrative authorities. In the dwelling statistics a dwelling can also be a unit not reported as a dwelling by the administrative authorities. In this case, the criterion is that the address of a unit matches an address of a household.

7.4 Coherence - internal

Inconsistencies between tenure, ownership and the result of the match between BBR- and CPR-addresses (dwellings with registered population) are corrected. Less than 1 pct. of the dwellings get another tenure (to either unknown or unoccupied)

8 Accessibility and clarity

- Yearbooks: The Statistical Ten-Year Review.
- Website: http://www.statbank.dk

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

News

STATISTICS DENMARK

8.5 Publications

Yearbooks: the Statistical Ten-Year Review.

8.6 On-line database

The statistics are published in the StatBank under the subject Dwellings in the following tables:

- BOL101: Dwellings by region, type of resident, use, tenure, ownership, year of construction and time
- BOL102: Dwellings by county, type of resident, use, year of construction, heating, toiletfacilities, bathfacilities, kitchenfacilities and time
- BOL103: Dwellings by county, type of resident, use, number of rooms, size of dwelling in square metre, household size and time
- BOL104: Dwellings by county, type of resident, use, tenure, type of household, number of children and time
- BOL105: Dwellings by county, type of resident, use, heating, toiletfacilities, bathfacilities, type of household, number of children and time
- BOL106: Dwellings by region, unit, use and time
- BOLRD: Occupied dwellings by tenure and time
- BOL201: Residents by county, use, tenure, ownership, year of construction, age, sex and time
- BOL202: Dwellings by county, use, heating, toiletfacilities, bathfacilities, kitchenfacilities, age, sex and time
- BOL203: Dwellings by county, use, tenure, number of rooms, household size, number of children, age, sex and time
- BOL204: Dwellings by county, use, tenure, type of household, number of children, age, sex and time

8.7 Micro-data access

None at the moment.

8.8 Other

Customer center uses the Census of Housings for many tailor made products.

8.9 Confidentiality - policy

See Data Confidentiality Policy at Statistics Denmark.

8.10 Confidentiality - data treatment

Information about individuals is not disclosed. This means that the name, PIN-number or other information that enables direct identification is confidential. Single-occurrence in a table cell must not make it possible to provide new knowledge about individuals'.

The dwelling statistics are shown in a way that it is not possible to obtain new knowledge about individuals.

8.11 Documentation on methodology

Description of the new BBR can be found at http://www.BBR.dk. In addition, the BBR information is also available at http://www.ois.dk.

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 Population and Education. The contact person is Annika Klintefelt, tel.: + 45 2331 1433, and e-mail: AKF@dst.dk.