**Documentation of statistics for
Market Value for Households Real Estate 2022**

## 1 Introduction

This is the first publication of the households' assets in real estate on individual level. The purpose is to follow the development of the households' real estate. Sector delimitation of units in the sector of households is defined in European system of national accounts (ESA2010). From this it appears that sole proprietorships are a part of the households' sector. Registers on individual level can be used for distribution analyses, e.g. in relation to income, financial liabilities or socioeconomic status.

## 2 Statistical presentation

The statistics provides closing values for each year. The household's real estate consisting of owner occupied dwellings and co-operative dwellings. All figures are reported in current prices.

### 2.1 Data description

Statistics Denmark has established an individual-based register with market values of the households' real estate. The real estate consisting of owner occupied dwellings and co-operative dwellings. The calculation of the market value of real estate is based on actual sales on the market. All figures are reported in current prices. The valuation of households' assets in real estate covers the period since 2004. Figures concerning 2014 are preliminary. Registers on individual level can be used for distribution analyses, e.g. in relation to income, financial liabilities or socioeconomic status.

Sector delimitation relative to households and non-households carried out by the national accounts definitions in the European system of national accounts (ESA2010). This indicates that sole proprietorships are part of the household sector, ie property owners in the household sector can be both individuals and sole proprietorships. The values of co-operative dwellings are also included as a part of assets in real estate, even though co-operative dwellings are not considered as a real asset. Equity Certificates are categorized as financial assets in ESA 2010.

Debt components from the wealth and income statistics are only described in Danish.

### 2.2 Classification system

The definition of the household sector follows European system of national accounts (ESA2010). It shows that individuals and sole proprietorships are the population in the household sector. The value of co-operative dwellings is also included as a part of the assets in real estate in the statistics, even though co-operative dwellings are not considered as a real asset. Equity certificates are categorized as financial assets in ESA 2010.

### 2.3 Sector coverage

Real estate includes occupied dwellings and co-operative dwellings. Property owners in the household sector can be both individuals and sole proprietorships. For owners of co-operative dwellings the statistics do not include sole proprietorships.

## 2.4 Statistical concepts and definitions

Financial wealth and loans: Individual data for financial wealth and loans are collected from the tax authorities. Not all financial financial wealth and loans are available at this level, for example, are financial wealth calculated exclusive pensions and unlisted shares. Totals for the household sector's financial wealth and loans can be found in Statistics Denmark's National Financial Accounts.

Market value for owner occupied dwellings : The official real estate valuations from the Danish tax authorities (Skat) do not reflect the market prices. The difference between the official real estate valuations and the market price depends on the market conditions, which are not described to a sufficient degree in Skats' official real estate valuations. By linking the actual real estate sales with the official real estate valuations, it is possible to calculate the average relationship between the actual price and the real estate valuation for the sold dwellings. This relationship is called the "Adjustment factor". In the model it is assumed that the adjustment factor between the actual purchase price (the market value) and the official real estate valuation is the same for individual types of real estate (e.g. one-family houses) within the same geographical area (e.g. a postal code). The market values of the dwellings that have not been sold are calculated by multiplying the adjustment factor with the official real estate valuation.

Market value for co-operative dwellings: Housing co-operative is a legal entity - usually a cooperation - that owns real estate, consisting of one or more residential buildings. The co-operative is membership based, with membership granted by way of a share purchase in the co-operative. Each shareholder in the legal entity is granted the right to occupy one housing unit (co-operatives dwellings). The model calculates the price represented by the individual co-operative dwelling, if the entire building was sold on market terms.

Type of municipalities: In the StatBank there is a classification of the municipalities in urban municipalities, intermediate municipalities, rural municipalities and outlying municipalities. The classification is used to illustrate the development of household real estate and debt of municipalities with different characteristics.

## 2.5 Statistical unit

The statistics is published for properties and families.

## 2.6 Statistical population

In the tables EJERFOF1 and EJERFOF2 all families, where at least one person have resided the entire year in Denmark, and are full tax liable. Time of recording for the families are 31. December. In the table EJDFOE1 the population is all persons or sole proprietorship, which owns real estate in Denmark, regardless of residency in Denmark.

## 2.7 Reference area

Denmark

## 2.8 Time coverage

Data is available from 2004 and onward.

## 2.9 Base period

Not relevant for this statistics.

## 2.10 Unit of measure

Number of properties or families. The market value in the statistics are in 1,000,000 DKK and shown in current prices. Average is stated in DKK per family or DKK per property.

## 2.11 Reference period

End of the year.

## 2.12 Frequency of dissemination

Annually

## 2.13 Legal acts and other agreements

There is no EU regulation in this area. A wide range of register data collected via the tax authorities etc. based on the general Law for Statistics Denmark.

## 2.14 Cost and burden

There is no response burden as the data are collected via registers.

## 2.15 Comment

[Theme page for Home equity](#)

# 3 Statistical processing

Data from the various registers are merged through property identification and personal identification. There are made classifications, aggregations and calculation of the market value. For publication there is added relevant background information about the families.

## 3.1 Source data

The calculation of the market value of real estate is based on information contained in the Register with Official Real Estate Valuations. The Register with Official Real Estate Valuations and the Building and Real Estate Register and the Business Register are used to define data and to the calculation of the market value. People statistics are used to group persons who owns real estate into families and wealth statistics are used for debt components.

## 3.2 Frequency of data collection

Annually

## 3.3 Data collection

Data from registers

## 3.4 Data validation

Non-matched records are controlled in the merged registers. There are made tabulations at different levels of data to check the level of calculated market value on macro level (e.g. tables on developments on municipal or regional level). There are no similar estimates for the market value of real estate, so the results at the macro level cannot be compared with other sources. The project has emphasized the quality-control of data during the linkage of information from the four registers. It is somewhat possible to compare the developments with the price indices for real estate. Although the price indices are on a more aggregated level.

## 3.5 Data compilation

There is two separate ways of calculating the market value, one for owners of real estate and one for shareholders in cooperative dwellings. To calculate the market value for owners of real estate, information about the official real estate valuations and the actual selling prices for the sold property makes it possible to calculate an average adjustment factor within a geographical area. The market value of the property that has not been sold is calculated by multiplying the adjustment factor with the official real estate valuations. In the model the adjustment factor is assumed to be identical for properties of the same type that are located within the same geographic area. The smallest geographic area in the model is the postal code. The model assumes the adjustment factor to depend on property type, geographic location and the property's price level.

The official real estate valuations are the basis for calculating the market value of cooperative dwellings as well. The valuation is distributed among the dwellings in the cooperative building. From the sales value of the cooperative dwelling certificate a correction factor is calculated, based on official real estate valuation. The sales price of the certificate contains information about the market value and debt including interest rate swaps of the entire cooperative building.

The market value of the cooperative dwelling is a quarterly statistic, the sales data for entire buildings are updated each quarter but the stock is based on the previous year. Sales data for the individual cooperative dwelling comes from a voluntary survey, which is conducted at least one time every year. This survey is necessary since there is no central registry of sales of cooperative dwellings in Denmark.

In a cooperative building without debt the correction factor will be similar to the correction factor for real estate in the same area. Debt in cooperative would reduce the correction factor. Cooperative buildings with a high level of debt will have a correction factor close to zero.

## 3.6 Adjustment

Not relevant for this statistics.

## 4 Relevance

The statistic has a lot of interested parties including ministries, politicians, organizations and the press..

### 4.1 User Needs

Ministries, political parties, non-governmental organizations, local government, public and private enterprises, and members of the general public.

### 4.2 User Satisfaction

There is no user- or contact-committee for this statistics. The users normally contacts the Responsible for the statistics directly in case of questions or comments.

### 4.3 Data completeness rate

Not relevant for this statistics.

## 5 Accuracy and reliability

The adjustment factor is the same within a geographic area, even though the actual sales value can vary a lot due to e.g. differences in the location of the owner-occupied dwellings (amenity), which are not reflected completely in the official real estate valuations. The preliminary year are dependent primarily on sales data for real estate. When the final year are calculated all of the sources are available. Experience from 2019 and 2020 shows that the preliminary year tends to underestimate the total market value of the final year.

### 5.1 Overall accuracy

To calculate the market value of real estate, the statistics used a correction factor, which adjusts the level of the value, so it corresponds to the market value. Use of correction factors are an average which does not take into account the individual differences between the properties.

### 5.2 Sampling error

Not relevant for this statistics.

### 5.3 Non-sampling error

The market value may depend on factors other than the property's location and price level. Examples of other factors which affect the market value include distance to the coast (especially holiday cottages), distance to shops and public transport, the age and condition of the property.

### 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 calculation of the market value of real estate is based on information contained in the Register with Official Real Estate Valuations, the Building and Real Estate Register, the Business Register and Register for Personal Data (PSD). The quality of data is high because the registers are validated and updated continuously.

### 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

Not relevant at this time

## 6 Timeliness and punctuality

The statistics i published with preliminary figures in march, 3 months after the reference date. Final figures is published a year later. One year and 3 months after the reference date.

### 6.1 Timeliness and time lag - final results

The statistics are published for the first time in June 2015 with figures from 2004 to 2015. It is expected to publish final figures for 2014 in January 2016. Afterwards it is expected to publish final figures for household wealth in real estate each year in December.

### 6.2 Punctuality

The statistics is normally published without delay with regard to the preannounced publishing dates.

## 7 Comparability

The statistic is consistent over time. However, one must be aware that the figures are calculated at current prices. There is no knowledge of any individual based register of household wealth in real estate, which is comparable to the Danish. Figures for total household wealth in real estate are also published in the statistics concerning financial national accounts which is published in June and November.

### 7.1 Comparability - geographical

There is no knowledge of any individual based register of household wealth in real estate, which is comparable to the Danish.

### 7.2 Comparability over time

The statistic is consistent over time. However, one must be aware that the figures are calculated at current prices.

### 7.3 Coherence - cross domain

Figures for total household wealth in real estate are also published in the statistics concerning financial national accounts which is published in June and November.

### 7.4 Coherence - internal

Not relevant at this time.

## 8 Accessibility and clarity

These statistics are published in a Danish press release and in the StatBank under Real estate, and the theme page

### 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 in a Danish press release.

## 8.5 Publications

Publications only in Danish.

## 8.6 On-line database

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

- EJERFOF1: Wealth in real estate and loans for families by type of components, municipality of residence, unit, family type and time
- EJDFOE1: Market value for households real estate by valuation, municipality of residence, unit, type of real estate and time
- EJERFOF2: Wealth in real estate and loans for families by type of components, municipality of residence, unit, group of households and time

## 8.7 Micro-data access

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

## 8.8 Other

Not relevant for these statistics.

## 8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is followed.

## 8.10 Confidentiality - data treatment

Christiansø and Bornholm are merged.

## 8.11 Documentation on methodology

Documentation on methodology only in Danish.

## 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 General government statistics. The persons responsible are: Mikkel Bjerre Trolle, tel. +45 3917 3549, e-mail: mit@dst.dk

### 9.1 Contact organisation

Statistics Denmark

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