

# **Documentation of statistics for Personal assets and Liabilities 2021**



#### 1 Introduction

The purpose of these statistics is to provide register based information on the distribution of assets and liabilities in different strata in the population. In addition to this, it is also used in analyses of the pension system and to measure economic inequality. The statistics has been produced since 2014.

# 2 Statistical presentation

The statistics produces annual data on the value of pension schemes, value of real estate, cars, financial assets and liabilities on either personal or family level. The statistics can be grouped by family type, gender, age, income, ownership relation to the dwelling, municipalities etc. Since all data is person-specific, it can be combined with other person-specific data in Statistics Denmark's databases.

# 2.1 Data description

The statistics give detailed information on various types of assets and liabilities. The statistics are register based and covers almost the entire population. The reference data is the 31st of December in the given year. The statistics includes annual wealth- and debt by wealth components, including the value of owned property, cars, assets in financial institutions, Pension wealth, credit institutions as well as data on debts. Frozen holiday funds and debt to the public sector has been added from 2020.

In July/August, the preliminary data on pensions (excluding civil servant's pensions) are published in the Statbank while the total wealth- and debt statistics are publicized in the Statbank and in NYT from Statistics Denmark about 12 months after the referencedate. The individual wealth- and debt items concepts are described here: Overview of the individual wealth- and debt items Special information about the pension assets can be found in this special document: Documentation of pension variables, including civil servants' pension and the voluntary early retirement scheme (VERS) About the differences between the family distributed wealth- and debt statistics and the national accounting-based statistics, see Differences between the national accounting and family-oriented wealth statistics.

#### 2.2 Classification system

The basic structure of the wealth components are inspired by the OECD

The data are among other disseminated by type of family, ownership of dwelling, income in intervals, socioeconomic status, educational level, municipality, age and gender. The strata will whenever possible correspond to those that are used in the income statistics.

# 2.3 Sector coverage

The houshehold sector.

#### 2.4 Statistical concepts and definitions

Age: Age on December 31st



#### 2.5 Statistical unit

The statistics is published on persons and families.

# 2.6 Statistical population

The statistics includes all families, where at least one person have lived in Denmark for the entire year. The families are defined based on census data on the 31st of December. This delimitation has been made in order to make the data totally comparable with the definition in the income statistics.

#### 2.7 Reference area

Denmark.

# 2.8 Time coverage

The statistics on wealth and debt covers 2014 and onward – the data for every year was collected on the 31st of December in the given year. A few components, mainly financial assets, public property assessments and debt are available in the income registers further back in time. See under "Comparability over time".

#### 2.9 Base period

Not relevant for these statistics.

#### 2.10 Unit of measure

DKK per person/family.

#### 2.11 Reference period

The statistics contains information on wealth and debt on the 31st of December in the given year. Households are also defined on the 31st of December.

## 2.12 Frequency of dissemination

Annual

# 2.13 Legal acts and other agreements

Much of the data is collected via the tax authorities based on  $\S 6$  in the law on Statistics Denmark. The pension data is collected based on the law of The Danish National Bank,  $\S 14$  a. The statistics also provides data for EU-SILC, that is regulated by  $\underline{EU}$  regulation  $\underline{2019/1700}$ .



#### 2.14 Cost and burden

KMD & the pension companies delivers data for the statistics. The administrative burden have not been quantified. For the Danish Tax administration there should be no large burden, as data are collected anyway for assessing the tax statements.

# 2.15 Comment

None.

# 3 Statistical processing

Data from the different statistical sources are combined using the personal identification number.

# 3.1 Source data

Most data on financial assets and debt comes from the tax authorities. Some data from the municipalities on unpaid property taxes are added to this. The pension data are collected from the pension funds in close cooperation with the Danish National Bank. The value of cars is assessed by using used car sales prices from AutoBranchen Danmark. Up-to-date sale prices on houses come from a mix of a register on house sale prices, the Building and dwelling register and the public property assessments. The municipalities (mainly KMD) delivers data on postponed payments of real estate taxes. The Danish Debt Collection Agency (Gældsstyrelsen) delivers data on public debt.

#### 3.2 Frequency of data collection

Annual.

#### 3.3 Data collection

The sources are as mentioned in 3.1. The models that estimate the sales value of property & cars as well as Civil servant pensions are executed within Statistics Denmark.

All data contains personal identification numbers etc. that are used to link the various inputs and to the central personal register. The personal identification numbers are replaced by random identifiers and only information relevant to the production of the statistics enters the data processing phase.

# 3.4 Data validation

The data on pensions is validated by Statistics Denmark and The Danish National Bank. Data is validated on both the micro level and the macro level where the data form each pension provider is compared to the accounting data. Most other data coming from the tax system are validated by the tax authorities. Only minor validations are conducted when seeking more information and to check for new codes in the data since it is assumed that the tax authorities validated the data beforehand. Prior to publication, the annual changes to the wealth components are evaluated and compared to secondary sources, where these are available.



#### 3.5 Data compilation

All data is linked via the personal identification number. Data is grouped and aggregated and relevant background information on the families or persons are integrated for the publications. In 2020 the frozen vacation funds are calculated as the balance on the 1st of June 2021 and payouts from January to May 2021. Pension bonuses / reserves are allocated proportional with the value of the base pension between the pension holders different pension accounts. Pension companies are grouped by type based on an annual report from the Danish Financial Supervisory Authority.

# 3.6 Adjustment

Not relevant for these statistics.

#### 4 Relevance

These statistics are relevant for researchers, ministries, organisations, pension funds and the media. It is used for forecasts on the pension system and, analyses on the level of wealth in different strata, the level of prosperity and the level of economic inequality. The statistical data and results are also used in other statistical areas within Statistics Denmark, e.g. in national accounting and as a supplement to the income statistics.

## 4.1 User Needs

Statistics about wealth and debt focused on the individual level can give important input to analyses of e.g. how wealth is distributed among various household types and what economic situations they are in. Especially data about the distribution of pension assets is interesting for the evaluation of the Danish pension systems and its effect on both the future living conditions of households and its effect on state finances. Researchers, ministries and pension providers are therefore especially interested in these data.

#### 4.2 User Satisfaction

There are no surveys on consumer satisfaction.

# 4.3 Data completeness rate

The statistics in in compliance with the law. All wealth components that are available at the individual level have been included in the statistics. . A memo that can be found on the topic page concerning wealth clarifies which wealth components that have not been included.

# 5 Accuracy and reliability

The quality of the financial data is high since most of the data is validated by the tax authorities. But there can be some uncertainty regarding the precise classification of the individual financial components if the classification does not have tax-related or administrative importance. There is much larger uncertainty on the imputed market value of owned property and cars and the value of lifetime pensions. Data on assets that can not be linked to persons is not included.



# 5.1 Overall accuracy

The Quality of financial data are quite high as the data are checked by the Tax administration. It should be noted that the value of unlisted shares are not included. Wealth and their associated income generated from interests and dividends that are hidden abroad are not included either. However it may in some cases be difficult to distinguish between the different types of components. I.E. between 2015 and 2016 large amounts have been moved from "F.1.1 other bank loans" to "E.2. Mortgage debt in banks". This does not affect the overall amount of assets or liabilities. Data on pensions does not serve administrative purposes which might affect quality. Data are validated by comparing data at the micro level with the aggregate levels in annual financial reports from the pension companies. The value of pension assets abroad are not included. Data on ownership of houses and cars are of high quality, but assessing the exact market value of these assets is difficult. These estimates are linked with uncertainty.

#### 5.2 Sampling error

Not relevant for these statistics.

#### 5.3 Non-sampling error

Assets not registered by the authorities are not in the statistics. This includes "hidden" wealth abroad, stocks of cash and stocks that are not in bank deposits (Often non-traded stocks) and cash. The value in owned property is based on the public evaluations that have been shown to occasionally be severely inaccurate at the individual level. The model that re-calculate evaluations to market prices cannot compensate for this.

#### 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 data varies dependent on the type of component. Financial components are assumed to collectively be of high quality as data that are relevant to tax payments are verified by the tax administration albeit the distinction between the individual components may not be perfect, if the distinction does not serve an administrative purpose. But incorrect codes have been utilized – especially in areas that do not have direct administrative importance. This could have as consequences that sums move between individual components if the person registering the data uses and invalid code. The ladder should not affect the total assets or debt. While ownership is based on solid register data, the values of houses and cars are imputed based on sales prices and used car prices. These evaluations might be uncertain. Finally note, that not all types of wealth and debt are covered.

# 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

Annual revisions are not conducted. The statistics remains under development. Revisions can occur to the degree that we post-publication receive significantly better data or that we make improvements of the statistics. Lately for 2020, we have revised the value of debt for vacation housing.

## 6 Timeliness and punctuality

These statistics are published approx. 12 months after the end of the reference year. Publications are released on time without delays, as stated in the release calendar.

#### 6.1 Timeliness and time lag - final results

The final data are published about 1 year after the end of the reference period. Uniquely for the pensions assets applies the procedure that they are published in July/August. These data are however preliminary in the sense that they do not include civil servant's pensions.

#### 6.2 Punctuality

The statistics is published about a year following the reference time, the 31st of December.

#### 7 Comparability

These statistics have been compiled since 2014 and are comparable over time with the exception of minor data inconsistencies between 2015 and 2016 and between 2016 and 2017 in the classifications.. These statistics are compiled according to common European guidelines, but are unique as the only complete register based statistics with almost full coverage on wealth and liabilities. Use caution if doing international comparisons.



# 7.1 Comparability - geographical

As far as we know, similar register based statistics are not produced elsewhere that have as extensive coverage as the Danish ones – international comparisons may produce skewed results due to different methods of data collection and coverage. Use caution if doing international comparisons.

#### 7.2 Comparability over time

In 2020 statistics Denmark has collected new data on frozen vacation funds, obligatory frozen debt for payment of increments in land-taxes and public debt to be collected by the Danish tax administration (Gældsstyrelsen). The ladder is not part of the net-wealth in 2020.

When the statistics were established in 2014, there were limited options for comparing data over time. As we do not have figures from years before 2014 we cannot compare with data from earlier years. From 2015 to 2016 there was a change of reporting procedure that had the consequence that a double-digit amount in the billions was moved from the component "F1.1 other loans in financial institutions" to "E.2 loans with mortgage in owned property". This does not affect the overall debt levels. The overall levels of the wealth components are now comparable across time from 2014. Concerning car-wealth, a new calculation procedure was implemented in 2017. At the same time, there was a change in the previous publication of gross prices (including dealer margins etc.) turned into net prices that sought to reflect what a used car can be sold for. Data from before 2014 have retroactively been recalculated using the new method for owned property and cars as well as financial wealth components. Exclusively for pension assets, exist consistent accounts from the period 2004 – 2013. If one seeks information on debts, it is possible to find comparable micro-data in the income statistics that go all the back to 1997.

#### 7.3 Coherence - cross domain

Data on wealth at the macro level is published in the national accounts. In 2014, a memo was made about the differences between the individual-based statistics and the national accounts. The National accounts include macro data on wealth components that are not available at the level of individuals I.E. non-traded stocks. This includes e.g. unlisted shares and cash. The statistics on personal assets and liabilities are a subset of these statistics. The financial wealth components that are also included in the income statistics are also very internally consistent. The few difference that occur are caused by the often changing points of time during the day that the tax authorities' systems register their data.

#### 7.4 Coherence - internal

Not relevant for these statistics.

# 8 Accessibility and clarity

These statistics are published yearly in a Danish press release, at the same time as the tables are updated in the StatBank. In the StatBank, these statistics can be found under <u>Family distributed</u> <u>assets and liabilities</u>. For further information, go to the <u>subject page</u>.



#### 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

These statistics are published yearly in a Danish press release.

#### 8.5 Publications

Publications are only available in Danish.

#### 8.6 On-line database

The statistics are published in the StatBank under the subject <u>Family distributed assets and liabilities</u> in the following tables:

- FORMUE7: Assets and liabilities per person by type of components, sex, age and time
- FORMUE1: Net wealth by type of components, family type and time
- FORMUE2: Net wealth by region, type of components and time
- <u>FORMUE3</u>: Net wealth by deciles of equivalence weighted disoable income, type of components and time
- <u>FORMUE4</u>: Net wealth by socioeconomic status, head of household, type of components and time
- FORMUE5: Net wealth by ownership of dwelling, type of components and time

Wealth statistics regarding **Pensions** can be found in the following tables:

- TJENo1: Accrued civil servant pension for active civil servants by sector, unit, sex, profession, ages groups and time
- TJENo2: Accrued civil servant pension for retired civil servant by sector, unit, sex and time
- PENFOR11: Value of pension schemes by kind of pension, taxation, age, sex and unit
- <u>PENFOR12</u>: Value of pension schemes by family type, age, sex, price unit and value of pension schemes
- <u>PENFOR20</u>: Value of pension schemes by kind of pension, company type, age, population, taxation and unit

#### 8.7 Micro-data access

Researchers and other analysts from authorized Danish research institutions, can be granted access to the underlying micro-data by contacting <u>Research Services</u>. The micro-data is anonymized.



#### 8.8 Other

It's possible to order custom made tables by paying for the working hours needed to create them. Read about the <u>terms and conditions</u> on the website. The statistics have also been used for analyses (Danish only). - <u>Household real-estate wealth</u> - <u>Parents purchasing homes for their children</u> - <u>Inequality in real estate ownership</u> - <u>Debt levels in Danish households?</u>

It is possible to order custom-made tables based on the anonymized data by paying for the working hours needed to create them. Read more about it in the terms and conditions on the <u>website</u>, or contact DST Consulting.

# 8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is applied.

#### 8.10 Confidentiality - data treatment

Christiansø is counted together with Bornholm. Besides this no special confidentiality measures are taken as the statistics are not published at a fully detailed level.

#### 8.11 Documentation on methodology

Documentation on methodology is only available 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 these statistics is in the division of Labour and Income. The person responsible is Jarl Quitzau, tel. +45 3917 3594, e-mail: JAQ@dst.dk

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