

**Documentation of statistics for
Household Budget Survey 2024**

1 Introduction

The Household Budget Survey describes in detail the Danish households' expenditure on goods and services and the economic condition of the households. The statistics are used to compile weightings in the Consumer Price Index and for calculation of the private consumption in the National Accounts. The statistics were first compiled in 1897 and annually since 1994.

2 Statistical presentation

The Household budget survey is an annual statement of the detailed private consumption at household level for private households in Denmark. The survey covers private households in Denmark. The household budget survey provides a detailed breakdown of consumption. In the most detailed breakdown, consumption is divided into approx. 1,200 different consumption types.

2.1 Data description

The Household Budget Survey is an annual statement of consumption in private households. A private household is defined as an economic unit, ie a group of people who live together and have a high degree of common economy, ie share income and expenses. Persons in various types of joint households (prisons, long-term hospitalizations, certain institutions, etc.) are not covered, as it will often be impossible to separate the private economy from the institution's finances. For some of the information in the study, it is necessary to be aware of this omission, eg when analyzing hospital use (as more permanent hospital admissions are not covered). It is the private economy that alone is highlighted. Goods consumed in production (operating assets, etc.) and other business expenses are not included.

The results of the Household Budget Survey are published in nine annual tables describing consumption per. household for a given year and background information about the households such as income levels, housing conditions, geography, type of household etc. The average consumption for all Danish households as a whole (not by type) is distributed on a detailed item level (COICOP2018 at 5-digit level), which includes almost 300 items and is shown in both current and fixed prices. In six tables, consumption is calculated at a less detailed level, namely at almost 50 items (calculated at a 3-digit level in COCIOC2018). On the other hand, consumption is broken down by type of household, socio-economic status, total income, type of housing, region or age. The last table shows income and consumption by income type. Consumption here is not divided into product groups.

2.2 Classification system

Consumption is classified by purpose in accordance with the international standard Classification of Individual Consumption according to Purpose 2018 (COICOP2018).

The international recommendations only give instructions on the division of consumption at an overall level, but Statistics Denmark makes a further division in order to meet specific needs.

Total consumption can in the statement immediately be grouped as follows:

- Level 1 13 groups
- Level 2 49 groups
- Level 3 137 groups
- Level 4 271 groups
- Level 5 680 groups
- Level 8 approx . 1,212 individual items

see the variable list at: <https://www.dst.dk/forbrug>

For fundamental reasons, Statistics Denmark does not conduct a breakdown of the consumption of certain brands.

In addition, a large number of other groups which are documented on the website of Statistics Denmark: [Nomenklaturer](#). This is for example; region and education.

2.3 Sector coverage

Not relevant for these statistics.

2.4 Statistical concepts and definitions

Household (Household budget survey): A group of individuals who live together and share a high degree of financial interdependence, meaning they are economically dependent on one another.

Head of household (Household Budget Survey): The person in the household with the highest total income.

2.5 Statistical unit

Households.

2.6 Statistical population

All private households in Denmark.

2.7 Reference area

Denmark

2.8 Time coverage

2015-2024.

2.9 Base period

The base period for constant price calculations are at present year 2015.

2.10 Unit of measure

Consumption is measured as DKK per household per year. All amounts include VAT.

In addition, a number of characteristics are calculated, on average, for the persons in the households. These are; persons per household (including the number of children and adults), age of head of household, share of homeowners in the household and share of households with a female head of household.

Furthermore, characteristics are calculated, on average, for the dwelling itself, including size of dwelling in square meters and year of construction.

2.11 Reference period

Consumption is calculated as an annual average for the year.

2.12 Frequency of dissemination

The figures are published annually.

2.13 Legal acts and other agreements

Up to and including 2024, the Household Budget Survey was based on a 'Gentlemen's Agreement', meaning that it was voluntary for the individual Member States to provide data to the EU. In 2019, it was decided that, from 2024 onwards, the Household Budget Survey would be based on the IESS regulation, cf. [Regulation \(EU\) 2019/1700 of the European Parliament and of the Council 2019/1700 of 10 October 2019](#)).

2.14 Cost and burden

No response burden has been estimated since participation in the survey is voluntary.

2.15 Comment

Further information can be found at the [subject page](#) or can be obtained by contacting the Section for the Household Budget Survey.

3 Statistical processing

The Household Budget Survey is a sample survey in which approximately 2,600 households are selected from Denmark's total of around 2.9 million private households. From 2024, data will be collected annually from about 1,300 households, and the sample for a given year's survey is based on data collected over a two-year period.

The survey includes information from three data sources: accounts, interviews, and administrative registers.

All consumption expenditures, incomes, etc. are adjusted to correspond as closely as possible to the price and volume level of the final year.

3.1 Source data

The Household Budget Survey is calculated at household level, and is based on a combination of interviews and accounting of the participating households. All households are simply randomly selected.

In areas where data are already known through registers, data are taken from those registers. The survey used records from:

- Income Register
- CPR register
- BBR register
- Training Register and The Employment Classification Module
- Hospital Utilisation statistics

3.2 Frequency of data collection

Data are collected annually. Households participate continuously throughout the year in the survey. In this way we ensure that seasonal consumption are represented in the survey.

3.3 Data collection

An external service provider is responsible for collecting data for the Household Budget Survey. Households that are randomly selected receive an invitation letter via Digital Post (eBoks) and are subsequently contacted by telephone to encourage participation. When a household agrees to participate, it must keep a 14-day consumption diary and complete a questionnaire (12-month account) on the household's fixed expenses and major expenditure items during the past year. The 14-day diary is digital but can also be completed on paper. From 1994 to 2019, the 12-month account was conducted exclusively through interviewer-administered personal interviews (CAPI). From 2019 to 2021, data were collected through a combination of telephone interviews (CATI), web-based interviews (CAWI), and personal interviews (CAPI). Since 2022, data have been collected solely through telephone interviews (CATI) and web-based interviews (CAWI).

In 2024, the data collection tool was expanded so that households can scan or photograph their receipts, which are uploaded automatically. Items and amounts are categorized by purpose using AI.

Data from administrative registers are retrieved as of 31 December in the reference year, or from the most recent available year. If data are retrieved from an earlier year than the reference year, they are adjusted for price and volume to match the price level of the reference year.

3.4 Data validation

Interview data is validated both during and immediately after the visit interview. The validation during the interview consists partly of logical and partly of probable checks, while the validation after the interview is done manually. A logical check could be, for example, whether the household has a TV, but has not reported expenses for a license or antenna association, or that the household has a car, but does not report expenses for weight tax, car insurance, etc. A likely check could be, for example, that very high or low amounts are investigated directly in the program used for the interview and that the household is confronted with this and must deal with whether it is correct.

When data is received in Statistics Denmark, it goes through a validation which, for example, involves assessing the household's consumption in relation to its size. If, for example, there is only one person and a very high water consumption, or there are, for example, two adults with children, where it has not been reported how many months have been used for daycare and school, the household will be contacted to clarify the accuracy of the information. Some corrections are made without contacting the household, where the description of the purchase and the amount seem contradictory. It could be, for example, that a liter of milk is registered with an amount of DKK 1,000. This will be corrected to DKK 10.00.

The 14-day accounts are validated continuously when they are received, and collectively when the collection of accounts for a year has been completed. In the overall validation, it will be checked, for example, whether all purchases are coded correctly according to the classification.

3.5 Data compilation

When we have finished the validation of the interviews and accounts booklets the registry variable are linked in the data set. Sometimes it's difficult to find the household in the sample in the register data, this kind of difficulties can often be attributed to differences in the calculation date. When this happens we make manual imputation of for example, an individual's level of education.

After finishing the processing of Micro-data the enumeration process of making the data representative for the entire country begins. The figures in all tables are weighted this is done in order to partially resolve the gaps, as different dropout and pure random coincidences leads. Those types of Household where the risk for not participating in the survey is relatively large, which therefore results in too few households in the survey are assigned a relatively large weight, while household types, as there are too many of, is assigned a relatively small weight.

Information about both the enumerated number of households in Denmark after the weighting and on the actual number of households in the survey can be found in most tables. This last statement is relevant to assessing the sampling uncertainty, since a small number of households results in a relatively large uncertainties.

The weights are calculated using a regression estimate. The focus is on each characteristics of the relationship between sample and population. The advantage of this method is that many more features are considered than in the former method were post-stratification was used. Following characteristics are involved in the estimation:

- Household size and composition
- Income
- Main Income Recipient's socio-economic status
- The household owns or rents the dwelling
- What type of urban household lives in
- Education
- Gender
- Geography

3.6 Adjustment

We do not make other corrections of data besides those corrections described during data validation and data processing.

4 Relevance

In addition to the general public the Household Budget Survey has a wide application. Internally in Statistics Denmark during the compilation of national accounts and price indexation. Public authorities' planning and feasibility studies, etc. Internationally, where especially EUROSTAT is very active in order to establish comparable figures between countries. Research in a number of areas, as well as for marketing purposes.

4.1 User Needs

In addition to serving the general public interests the survey has a broad group of users:

- It is used internally at Statistics Denmark in compiling price indices and national accounts statistics.
- Government bodies use the survey for purposes of planning and for conducting analyses of the consequences of new legislation, etc.
- The survey is used for researches purposes within several fields.
- The survey can be used for marketing purposes, etc.
- Internationally, the survey is widely used. Especially, Eurostat is very active in enabling comparability of the survey results among the EU Member States.

The statistics are very rich in detail and have a relatively long production time.

4.2 User Satisfaction

A user satisfaction survey has not been conducted.

4.3 Data completeness rate

The Household Budget Survey is indirectly subject to the Council Regulation (EC) No. 2494/95 (1) of 23 October 1995 concerning harmonised indices of consumer prices. The Household Budget Survey provides data to Eurostat every 5 years and meets in this respect the guidelines sent out by Eurostat.

5 Accuracy and reliability

Only 8 percent of the contacted households chose to participate in the Household Budget Survey. This creates uncertainty, particularly for detailed consumption groups. For total consumption, this results in a margin of uncertainty of ± 1.4 percent, while for items such as bread it is 1.8 percent, and as high as 18.6 percent for a rarely purchased item such as offal. There is underreporting in several areas, such as alcohol, tobacco, prostitution, and undeclared work. Uncertainty is greater when data are based on diary entries rather than interviews, and it increases further when looking at smaller subgroups of households.

5.1 Overall accuracy

Only 2,651 households out of the 32,150 contacted chose to participate in the 2024 Household Budget Survey. For total consumption in the entire population, there is a margin of uncertainty of ± 1.4 percent, meaning that the estimated total consumption of 377,034 DKK is expected, with 95 percent confidence, to fall between 366,740 DKK and 387,329 DKK. The uncertainty is greater for specific population groups and for goods that are purchased infrequently. Consumption estimates are therefore more precise for, for example, households with higher incomes or where the main income earner is of Danish origin, is employed, is over 49 years old, or has an education beyond compulsory school, as these groups are relatively more represented among survey participants.

5.2 Sampling error

The total sample for the 2024 Household Budget Survey (HBS2024) consisted of 32,150 households selected in 2023 (12,675) and 2024 (19,475). In 2023, 1,148 households participated, while 1,503 participated in 2024, giving a total of 2,651 participants in HBS2024. The participation rate for HBS2024 was therefore 8 percent. Sample uncertainty is calculated for each consumption group based on the households that chose to participate in the survey. For HBS2024, sample uncertainty is based on responses from the 2,651 participating households. Sample uncertainty is quantified using the coefficient of variation (the relative standard error).

The coefficient of variation for total household consumption in HBS2024 was 1.4 percent. This means that the 95 percent confidence interval for total household consumption is 377,033 DKK \pm 10,295 DKK. There is considerable variation in sample uncertainty between total consumption and individual consumption items. Items that are purchased frequently have lower sample uncertainty than those purchased infrequently. Bread, for example, is a product group that most households purchase regularly during the two-week diary-keeping period associated with the survey. The coefficient of variation for bread for an average household is 1.8 percent, whereas for a rarely purchased item such as offal, it is 18.6 percent. Similarly, the coefficient of variation for bread is 3.4 percent in the Capital Region (Region Hovedstaden) and 4.6 percent in the North Denmark Region (Region Nordjylland).

5.3 Non-sampling error

The sampling frame for the survey consists of occupied private household addresses in Denmark in a given year. The extraction frame, however, includes both private households and collective households. To avoid including collective households in the Household Budget Survey, only households with a maximum of eight residents are selected. This restriction may introduce some bias, as larger private households (with more than eight persons) are not included, but this bias is assessed to have limited impact on the results.

The frame population is based on two calendar years and must represent the target population for a specific year. The target population is therefore represented by combining the frame populations from 2023 and 2024. In general, the frame population from 2023 is considered to be largely representative of 2024, although some households may change characteristics from one year to the next.

Analyses have shown that households typically record fewer purchases in the second week than in the first week—both in terms of number of purchases and total value. The reasons are not entirely clear, but households may forget to register expenses or become more aware of their consumption due to the recording exercise, resulting in fewer purchases. To adjust for this decline, second-week diary data are upweighted by 4 percent, based partly on previous analyses.

Households may also tend to report consumption that deviates from actual behavior. For example, they may record more organic products than they actually purchase, as organic consumption is viewed positively. Conversely, they may underreport consumption of more negatively perceived items such as wine, spirits, and cigarettes. This can lead to either over- or underestimation of consumption.

During the 2024 data collection year, we improved the respondents' data collection tool. It is now possible for households to scan or photograph receipts, which are then uploaded automatically. Using AI, items and amounts are categorized by purpose.

This improvement has not only reduced respondent burden but also increased data quality, as we now receive households' actual receipts. In the longer term, we expect that second-week diary data will no longer need to be upweighted by 4 percent.

Interviewers are instructed on how to guide households in completing the diary forms to minimize errors. We have also developed instructional videos explaining what should be included. Households are asked to record their consumption every day during the 14-day diary period. Interviewers check in approximately halfway through the period to ensure households have begun recording as agreed.

Of the 32,150 randomly selected households, 29,499 declined to participate in the 2024 Household Budget Survey. This corresponds to an overall non-response rate of 92 percent. Among the non-participants, the majority explicitly chose not to participate, while 39 percent were households that could not be reached. The remaining cases were due to other types of non-response. In total, 2,651 households chose to participate—8 percent—and these form the basis for the survey estimates.

Among the 8 percent who participated, there is an overrepresentation of ethnic Danes, pensioners, employed persons, and employees at basic skill levels compared with the population as a whole. There are also relatively more households with persons aged 60 or older, and fewer young households, as well as fewer households where the main income earner has only compulsory schooling. Weighting procedures aim to correct for these imbalances.

Fewer households with the lowest incomes participate. Although weighting adjusts for this, the higher participation among high-income households may still lead to overestimation of consumption. The aim is for at least 1,600 households to participate each calendar year to ensure the desired sample uncertainty of 1 percent. The sample size is adjusted accordingly based on expected response rates. Register data—such as income and taxes—are used to supplement the sample.

In recent years, it has become increasingly difficult to obtain household participation. This is partly because interviews have shifted from CAPI (personal, face-to-face interviews) to exclusively CATI/CAWI (telephone/web interviews). It is easier for respondents to decline participation when they must answer independently via web or phone compared with when an interviewer is physically present at their doorstep. It has also become harder to reach households due to GDPR rules limiting access to phone numbers, as well as an increasing number of Danes using employer-provided phones that are not publicly registered.

The Household Budget Survey is based on a two-year moving average, where data from year 1 are adjusted for prices and volumes to match the level of year 2 (the reference year).

The sampling unit in the survey is the household address, but the target is private households. Because addresses are selected randomly, some collective households may be included, even though addresses with more than eight residents are excluded from the sampling frame. However, only a small number of selected addresses fall into this category and are screened out during data collection.

The number of residents and households at each address is determined by the interviewer and the respondents. The two-year moving average requires several assumptions about the weighted population. For example, if a household of four (two adults and two children) participated in 2023 and is selected again in 2024 but has dissolved, it is treated as unchanged. Likewise, it is assumed that deaths and emigration are offset by births and immigration.

Another source of uncertainty arises when we use data from external sources that we cannot influence ourselves. The major revision of the National Accounts in June 2025, which was applied retroactively, has likely affected the FU2023 results. When the 2022 figures were converted into price and volume measures, the quarterly National Accounts data used in the calculations had not yet been updated as part of the revision. As a result, the calculated levels for FU2023 may be slightly higher than they otherwise would have been.

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 Household Budget Survey is a sample survey, combined with a wide range of register variables. The survey is based on a simple randomly drawn sample. The survey has over a number of years been conducted by the same procedure.

The study's annual sample is not large enough to only give a reliable estimate of consumption. Therefore included sample data from the previous years also in the total charge for the year. The study has the character of a sort of "moving average".

Through several years the study has been conducted by the same procedure. This has been conducted partly to ensure a better comparison over time and partly to provide faster results and to minimise errors.

The Household Budget Survey was in the period 1994-2013 based on a three-year sample. From 2014 and onwards, the Household Budget Survey is based on a two-year sample. This is an improvement of the Household Budget Survey, since the figures brought forward by 12 months.

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

Since the publication of the Household Budget Survey 2017, there is only an annual publication, therefore no revisions will be made in the future.

6 Timeliness and punctuality

The statistics are published approximately 12 months after the end of the reference year. The statistics are usually published according to the time announced.

6.1 Timeliness and time lag - final results

The statistics are published approximately 12 months after the end of the reference year.

6.2 Punctuality

The statistics are usually published without delay in relation to the scheduled date.

The Household Budget Survey 2024 was delayed by approximately four weeks compared to the announced publication date due to a new data collection method and the resulting new validation procedures.

7 Comparability

The Household Budget Survey is carried out in accordance with the guidelines of Eurostat, the Statistical Office of the European Union. Comparable figures are published by Eurostat. From 1994 onwards, the survey methodology was revised so that the survey is now conducted annually using the same method and on a comparable basis.

Data for the years 2014 to 2022 were based on a two-year sample and the ECOICOP nomenclature. To ensure comparability over time, data from 1994 to 2013 were recalculated according to this nomenclature in both current and constant prices.

From 2024, COICOP2018 has been implemented in the Household Budget Survey as a result of the survey becoming regulation-based. Data from 2015–2022 have been recalculated in both current and constant prices according to COICOP2018 to ensure continuity.

7.1 Comparability - geographical

The calculation of the Household Budget Survey is based on international recommendations and therefore there is a good correlation with figures from countries of the European Union. Eurostat publishes every five years each country's Household Budget Survey in their publication databases.

7.2 Comparability over time

The mapping of Danish household consumption has a long history dating back to 1897, when the consumption of Danish working-class families was examined for the first time. In the period up to 1994, a series of different surveys of household consumption were conducted, often focusing on specific population groups. For example, in 1909 household accounts were prepared for urban workers, farm workers, smallholders and farmers, and in 1916 for civil servant families.

From 1971, dedicated household budget surveys were launched. The first survey covered the consumption of wage earners, while surveys from 1976 onwards included all private households. Since 1994, annual household budget surveys have been carried out for Danish households.

The previous data collection and estimation method was based on a three-year dataset, where observations from year $t-1$, t , and $t+1$ were combined into a single sample. Data for $t-1$ and $t+1$ were subsequently converted into price and volume measures for the middle year, t . This design meant that only the data for $t+1$ were fully replaced each year, while data for $t-1$ and t were largely repeated with price adjustments. As a result, the method essentially functioned as a moving average, reducing the survey's sensitivity to changes in consumption patterns.

From 2014 onwards, the sample was based on a two-year period. Although this change did not eliminate the challenges related to price adjustments, it contributed to faster production of results and therefore to more timely and useful statistics. Today, annual data collection continues, but the sample consists of two consecutive years: $t-1$ and t . For the 2024 survey, this means that data from 2023 ($t-1$) and 2024 (t) are included. All observations are converted into price and volume measures at the 2024 price level to ensure comparability across the dataset.

Since the publication of the 2014 data, the Household Budget Survey has been based on a two-year sample and on the ECOICOP nomenclature, which replaced the previously used COICOP1999 classification. To ensure comparability and continuity, data from 1994 to 2013 were recalculated in both current and constant prices according to the ECOICOP nomenclature.

Since 2012, the survey has been supplemented with consumption data in constant 2005 prices, enabling the analysis of volume developments over time. From the publication of the 2023 data onwards, Denmark has replaced ECOICOP with COICOP2018. To ensure comparability, data for 2015–2022 have been recalculated according to the new nomenclature. As a result, data can only be compared back to 2015.

COICOP2018 differs from ECOICOP in several important respects and includes, among other things, new consumption categories such as streaming services and mobile applications. The transition also involves a division of the former consumption group 12, leading to the establishment of a new main group, 13: "Personal care, social protection and miscellaneous goods and services." This provides a more detailed and contemporary classification of household consumption.

7.3 Coherence - cross domain

The classifications and definitions used are aimed to be as comparable as possible with the national accounts. But the methods, etc., in these two kinds of statistics are very different. The classification of consumption is based on the international COICOP₅ classification, which is also used in compiling price indices. It is difficult to conduct comparisons with the general population statistics and other register-based statistics, as the household definition in the survey is different: In the survey the household definition is the economic unit, which is decided by the household members themselves, while in the general population statistics the household definitions are derived from the administrative registers-based information.

These statistics are also used in the experimental statistics Income and consumption distribution in the household sector.

7.4 Coherence - internal

The Household Budget Survey is based on three data sources, interviews, accounting and registers. A great deal of work is done to ensure that the register information used is consistent and valid in relation to linking it to the interview and the accounting information.

8 Accessibility and clarity

The Danish Household Budget Survey is published 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 [Household Budget Survey](#). For further information, go to the [subject 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 Calendar can be accessed on our English website: [Release Calendar](#).

8.4 News release

These statistics are published in a Danish press release.

8.5 Publications

The Household Budget Survey does not feature in any [Publications](#) from Statistics Denmark.

8.6 On-line database

The statistics are published in the StatBank under the subject [Household budget survey](#) in the following tables:

- [FU11](#): Household budget survey by background information, group of households and time
- [FU12](#): Household average consumption by group of consumption, price unit and time
- [FU13](#): Consumption by group of consumption, households, price unit and time
- [FU14](#): Consumption by group of consumption, socioeconomic status, price unit and time
- [FU15](#): Consumption by group of consumption, total income, price unit and time
- [FU16](#): Consumption by group of consumption, type of dwelling, price unit and time
- [FU17](#): Consumption by group of consumption, region, price unit and time
- [FU18](#): Consumption by group of consumption, age, price unit and time
- [FU19](#): Average household income and consumption by type of income 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 [Denmark's Data Portal](#)

8.8 Other

Eurostat publishes internationally comparable statistics, including Danish, for the Household Budget Survey in their [database](#).

8.9 Confidentiality - policy

[Data Confidentiality Policy](#) at Statistics Denmark are followed.

8.10 Confidentiality - data treatment

The survey is performed under full anonymity. The publication is published so that it is not possible to identify individuals.

8.11 Documentation on methodology

Documentation on methodology only exists 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 Prices and Consumption, Economic Statistics. The contact person is A Solange Lohmann Rasmussen, tel.: + 45 6115 1793, and e-mail: SLR@dst.dk.