

Documentation of statistics for Personal income taxes 2023

1 Introduction

The purpose of the statistics Personal income taxation is to give information about tax bases, tax calculations and the various tax concepts, and also give a description of provisional and final tax. The statistics cover income taxes from 1994 and is published yearly in September. The statistics were first published in 1903, but in its current form the statistics cover every year from 1994 onwards.

2 Statistical presentation

The statistics is a yearly account of personal income- and wealth taxes, as they are in the final assessment. The statistics give information about tax bases, tax calculations and the various tax concepts.

2.1 Data description

The statistics provide data about calculated personal income and capital gains and their taxation at the time of the final assessment of the income year. The statistics give information about tax bases, tax calculations and the various tax concepts. The statistics contains an inventory of provisional and final tax. The provisional tax, or the tax at source, is a pay-as-you-earn tax, that is, it is paid as the income is earned. After the end of the income year the year-end balance sheet is completed and based on this the final tax is calculated. The difference between the provisional and final tax is either due to underpayment (final tax is higher than the provisional tax) or overpayment (final tax is lower than the provisional tax).

A complete overview of the relations between [different income and deduction concepts](#) concerning personal income tax is shown.

Most of the data is available in municipal and regional breakdowns. However, for some taxes, i.e. estate duty, the breakdown is not an option as data is only available at aggregate level. In the regional overview, be aware that the current regions are not able to levy taxes, in contrast to their administrative predecessors - the counties.

2.2 Classification system

These statistics are group by type of tax. Geographically these statistics are grouped by [regions and municipalities](#).

2.3 Sector coverage

Not relevant for these statistics.

2.4 Statistical concepts and definitions

Share tax: Share tax is calculated from the share income. If the income from shares is below a graduated limit, then the final tax is 27 pct. Is the income from share above a graduated limit, then a tax of 42 pct. is used for the income amount above the graduated limit, which is a part of the final assessment. The dividends tax which is a part of the dividends according to the Danish Withholding Tax Act § 65 is offset against the final tax accordingly to the Danish Withholding Tax Act § 67. The unexploited part of the threshold can be transferred to the spouse.

Labour market contributions: Employees contributions to the labour market fund is calculated from the gross pay. Gross pay consists of monetary remuneration which includes salary, holiday allowance etc., as well as the taxable value of employee benefits, which is A-income. Labour market contribution is also paid from ATP contribution as well as the share of the salary that the employer detains and paid into a pension scheme.

Limited tax liability: Limited tax liability is for people without residence in Denmark provided that they either have income from working, in possession of a property or be self-employed in Denmark. The limited tax liability implies that only certain incomes are taxable. The main principal is that every income which stem from activities or sources in Denmark are taxed.

Capital income: Covers e.g. interest received and interest paid.

Income tax for foreign scientists: Recruited researchers and other highly paid employees from outside Denmark can choose to be taxed under a special Danish tax scheme, called tax scheme for researchers ('forskerordningen'). The special scheme yields that a person will pay gross tax plus labour market contribution of their salary for up to 7 years. However, if a person decided to pay taxes based on the scheme, then they are not entitled to tax deductions or allowance of any kind.

Full tax liability: Fully liable to taxation is defined as people with residence in Denmark. People with foreign residence, who have had residence in Denmark within the last four years, are also fully liable to taxation unless they pay personal income tax in another country and that the paid tax is not evidently less restrictive than the Danish tax. This regulation also applies for Greenland and the Faroe Islands. The full tax liability also encompasses people who have stayed at least six months consecutively in Denmark, but do not have residency in the country. For course participants and students, full tax liability first occurs after 365 days within a 2-year period. Finally, for Danish citizens who by the government serves overseas are also fully liable to taxation in Denmark.

Compensation for senior allowance: Senior allowance is a abatement of the income tax by repaying a share of the paid labour market contribution. It is only possible to receive this compensation if one have reached the age of 64 in the period from 2010 to 2016 and in addition fulfills other requirements mentioned in the law. The calculated abatement is included in the computation of the final tax.

Compensation for higher green taxes ('green cheque'): The tax-free compensation - "green check" - was introduced because of the increased energy taxes. The compensation consists by an amount pr. person, who have reached the age of 18 and another amount for children under the age of 18. The child amount is received for either one or two children. The compensation declines for people with income over a certain amount.

Income deductions: Covers e.g. unemployment insurance, mileage allowance, and alimony, maintenance

Church tax: Church tax is a proportional tax is collected under the law about the economy regarding the Evangelical Lutheran Church in Denmark. The tax is paid by who are a member of the Evangelical Lutheran Church in Denmark.

Municipal tax: The municipality tax is in principal proportional and the local municipality determines the tax rate. The local government income tax is the taxable income minus income tax reliefs.

Personal income: Covers all income that is part of the taxable income and which is not capital income (e.g. A-income, surplus on self-employment, foreign income as well as other deductions in the personal income: labour market contributions and contributions for pension schemes with lump sum disbursement)

Share income: Covers the income of shares beyond the lower limit for increased taxation of dividend of shares

Person liable to taxation: Fully liable to taxation is defined as people with residence in Denmark. People with foreign residence, who have had residence in Denmark within the last four years, are also fully liable to taxation unless they pay personal income tax in another country and that the paid tax is evidently less than the Danish tax. This regulation also applies for Greenland and the Faroe Islands. The full tax liability also encompasses people who have stayed at least six months consecutively in Denmark, but do not have residency in the country. For course participants and students, full tax liability first occurs after 365 days within a 2-year period. Finally, for Danish citizens who by the government serves overseas are fully liable to taxation in Denmark.

Central government tax: Central government tax consists of ordinary income tax (lower limit), additional income tax (upper limit), and equalization tax. Ordinary income tax (lower limit) and additional income tax (upper limit) is calculated from the personal income tax, where payment to pension schemes with lump sum disbursements cannot be deducted. From 2011 to 2017, the equalization tax was added to large pension payouts over a boundary. The tax is also called state tax.

Healthcare contribution: A healthcare contribution was introduced in connection with the municipality reform in 2007. The contribution is paid from the taxable income minus personal allowance. The scheme expired in 2019.

Taxable income: Is defined as personal income plus capital income minus income deductions

Corporation tax: There are two options for self-employed persons when choosing taxation for the corporation. The taxation can either be a part of the regular personal income taxation or register as a business arrangement ('Virksomhedsordningen'), which makes it possible to be taxed based on corporation-like terms.

Imputed income tax from owner-occupied dwelling: A tax which is calculated from the value of the property. The tax calculation is based on the lowest value of 1) the property value in 2001 added 5 pct., 2) the property value in 2002 or 3) the property value in the current income year.

2.5 Statistical unit

The unit is the individual person.

2.6 Statistical population

All persons above 15 years who are liable to taxation

2.7 Reference area

Cover individuals who are fully liable to taxation (*Fuld skattepligt*) in Denmark even if they don't have Danish residency.

2.8 Time coverage

The statistics cover the period from 1903.

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

DKK millions.

2.11 Reference period

The calendar year.

2.12 Frequency of dissemination

Annual.

2.13 Legal acts and other agreements

The legal authority to collect data is provided by section 8 of the Act on Statistics Denmark.

The statistics fall under Council Regulation 2223/1996 on national and regional accounts, Council Regulation 2516/2000 on common principles of the European system of national and regional accounts in the Community (ESA 95) as concerns taxes and social contributions, Commission Regulation 995/2001.

2.14 Cost and burden

There is no direct response burden since the data are collected for other purposes.

2.15 Comment

Further information can be found at the [Subject page](#) for these statistics, or by contacting Statistics Denmark directly.

3 Statistical processing

Data is extracted annually from the Danish Tax Agency. Not all taxable persons are included in the data extract, so income tax is calculated for the missing persons, so that it is possible to describe the development for all taxable persons in Denmark. The validation takes place by comparing the level of total income taxes in relation to the previous year, where both business tendencies and possible tax rate changes are taken into account.

3.1 Source data

Data are compiled from the Register of Personal Income Taxation (called System 28 or SKATTELE), which registers all personal incomes, income deductions and income taxes in the income year. The register is a part of the Danish Tax Agency. The system comprises tax assessment notices with breakdowns on all tax concepts as well as income and deductions concepts. The system is updated on a continuing basis as more people are assessed and any changes to already finalized assessment notices are incorporated in the system.

Statistics Denmark collects provisional data for 2022 and 2023 in October 2024. For 2021, the data is collected in November 2023; while data for 2017 - 2020 are based upon data collected in November in year two after the income year have ended. From year 2017, the data is grossed up based on the number of similar persons compared to the total number of persons liable to taxation.

3.2 Frequency of data collection

Data are collected annually with periodic updates three times a year. The Danish Tax Agency updates the data on a continuing basis.

3.3 Data collection

Register data from Personal Income Taxation (System 28), which is a part of the Danish Tax Agency. The system is a reference tool, which includes the total amount of tax assessment notices displayed in different tables.

3.4 Data validation

Statistics Denmark validates the new level of income taxes by comparing it to the level of the previous year every time a new year is published. The comparison takes both business tendencies and possible tax rate changes into account. Data for the two previous years are also validated as new data are available and is not finalized until three years after the end of the income year in question. The validation is performed in a similar manner – here the new level is compared with the levels of the previous publication, where again both business tendencies and possible tax rate changes are taken into account.

3.5 Data compilation

The first data delivery from the Danish Tax Agency does not include all persons liable to taxation as the process of finalizing all tax assessment notices has yet to be completed at this point. Data is therefore grossed up so that it covers personal income taxes for the entire tax liable population rather than merely the share of tax assessment which has been finalized by the Tax Authorities. Data is grossed up by juxtaposing the number of persons who have had their tax notice assessed to the total number of persons liable to taxation.

The grossing up is carried out at national and municipal level. The grossing up coefficients will differ as they depend on the share tax assessment notices that have finalized in each geographical subdivision. For the final tax assessment for municipalities, the income tax is based upon the municipality where the person is registered for tax purposes on the 31st of December within the income year (*Slutligningskommune*). For taxpayers, who within the income year have moved between two municipalities, a subsequent division of both municipality and church tax revenue between the two municipalities in question is conducted.

3.6 Adjustment

There are no corrections of data beyond what has already been described under data validation and data compilation.

4 Relevance

The statistics are part of the general economic debate. The statistics is in demand from ministries, politicians, public and private institutions, researchers, enterprises and news media. The statistics often get a lot of attention in the media and amongst other professional users.

4.1 User Needs

The users are local authorities, government departments, organizations, private firms and private persons. The statistics can be used to get information about personal income and personal taxation in Denmark.

4.2 User Satisfaction

Statistics Denmark has several forums where key users of the statistics have the opportunity to participate, e.g. [The User Committee for Economic Statistics](#) (only in Danish) has the following general tasks:

- Discuss and evaluate the results obtained and the planned development in the economic statistics
- Discuss users' use of economic statistics and their need for new statistics
- Discuss quality, documentation and dissemination of economic statistics

4.3 Data completeness rate

All data are published.

5 Accuracy and reliability

In the first dissemination of the statistics, some information for some taxpayers is missing. The tax payments of these persons are therefore calculated to give an overall picture of the development in income taxes for persons. Also in the final version of the statistics, some taxpayers' information is missing, the statistics therefore contain calculated figures. In the preliminary versions of the statistics some tax types are corrected for biases, as these tax types are potentially underestimated in relation to the final value.

5.1 Overall accuracy

At the first publication of a given income year, approximately 99.0 pct. of the people who are liable to taxation has been assessed. After the income taxes have been grossed up, the total income tax equivalates approximately 99.4 pct. At the second publication of a given income year the number of finalized assessment notices increases such that approximately 99.6 pct. of people who are liable to taxation have been assessed. After the income taxes have been grossed up, the total income tax equivalates approximately 99.9 pct. At the third and final publication of a year the assessment rate for people who are liable to taxation increases to 99.9 pct. After the income taxes have been grossed up, the total income tax equivalates approximately 99.96 pct.

The reason why the income taxes will not amount to 100 pct. is that the Danish Tax Agency updates their data on a continuous basis as more people who are liable to taxation are assessed and any changes to already finalized assessment notices are incorporated into the data.

5.2 Sampling error

Not relevant for these statistics.

5.3 Non-sampling error

The process of finalizing all tax assessment notices is complex. Some notices take longer to finalize than others. In the first dissemination of the statistics, a percentage of the population liable to taxation in Denmark will be missing in the data set because their tax assessment notices have yet to be finalized. Consequently, it is necessary to gross up the taxes in the data set in order to describe the income taxes for the entire population, who are liable to taxation in Denmark. The data is grossed up by multiplying a coefficient to the already reported taxes. The coefficient is calculated as the ratio of persons who have had their tax assessment finalized compared to the total number of persons liable to taxation. This procedure is implemented in both preliminary and final versions of the statistics.

Non-response error will be greatest at the first publication. Non-response error emerges when data does not include the entire population and it occurs because of the following conditions. Some people have extended deadlines for reporting to the Tax Authorities, some people choose not to report to the tax authorities, some cases are complex and take longer to complete, and finally, there might be corrections to already finalized tax assessment notices. Therefore, the coefficient used to gross up the data will be largest at the first publication. As more data are assessed, the need to gross up the data will be smaller. At the final version of an income year it is, however, still necessary to gross up the data since the data might still contain non-response errors.

The Danish tax authorities continually implement corrections to data, which minimizes measurement errors. Measurement errors occur when the statistics does not measure correctly. Experience from Statistics Denmark has shown, however, that beyond 1½ year after the end of the income year, only minor changes will happen to the final assessments. Some tax cases are not concluded until several years after the end of the income year. The tax authorities will continue to implement these corrections to specific datasets concerning changes, and as a result of this the final assessment will never be completely "final".

For some preliminary tax concepts, it is necessary to correct for potential bias. The reason for this is that the tax concepts are underestimated compared to the final value. The bias corrections are based on previous year's difference between preliminary and final values. Thus, the corrections are removed when a year is finalized.

The statistics cover almost every person who is liable to taxation in Denmark, which is why coverage error is minimal for these statistics. The reason for the minimal coverage error is that data changes can be allocated back to the year the data change actually belongs to. This means that if a notice is not finalized until 2021, even though it pertains to income taxes in 2019, the notice will be allocated to the income taxes in 2019 and not affect the income taxes in 2021. Due to Statistics Denmark's revision practice corrections are not carried further back than three years. The years beyond that are considered final.

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 overall quality of the statistics is considered very good because of the comprehensive data foundation available for the production of personal income taxes. Data is collected from the Danish Tax Agency's administrative registers, which is updated on a continuous basis as more people are assessed and any changes to already finalized assessment notices are incorporated into the data. Already at the first publication of the statistics approximately 99.0 of the people who are liable to taxation have been assessed. After the grossing up to the total population, the total income tax constitutes approximately 99.4 pct. At the third and final publication of a year the assessment rate for people who are liable to taxation increases to 99.9 pct. After the grossing up, the total income tax constitutes approximately 99.96 pct.

Statistics Denmark processes the data from the Danish Tax Agency by grossing up the data to ensure that every person liable to taxation in Denmark is represented in the data set. In addition, it is also necessary to correct for potential bias, since some tax concepts are underestimated in the preliminary version compared to the final value. The purpose of this procedure is to minimize non-sampling error in the data. Subsequently, data is validated by comparing the new income level to the level of the previous year or publication. The comparison takes both business tendencies and possible tax rate changes into account.

The first version of preliminary personal income taxes is published in November after the end of the income year. There are normally only minor revisions between the provisional and final numbers. The revision between the first and the final publication is 0.6 pct. of the total income tax, whereas the revision between the second and final publication is less than 0.1 pct. The final income taxes are published in September, three years after the end of the income year in question. The revision frequency is consistent with national accounts.

The statistics are part of the general economic debate and often gets a lot of attention in the media and among other professional users.

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

Some tax cases are not concluded until several years after the end of the income year. The Danish tax authorities will thus continually receive corrections to data. The corrections are added to specific datasets concerning changes, and as a result of this the final assessment will never be completely “final”. Experience has shown, however, that beyond 1½ year after the end of the income year, only minor changes will happen to the final assessments. Statistics Denmark thus only makes corrections concerning the latest three years while earlier years are considered as final.

6 Timeliness and punctuality

The Statistics are published yearly in November. The first version of the preliminary income taxes is published in November after the end of the income year. The final income taxes are published in November, three years after the end of the income year in question. Publications are released on time, as stated in the release calendar.

6.1 Timeliness and time lag - final results

The Statistics are published yearly in November. The first version of the preliminary income taxes is published in November after the end of the income year. The final income taxes are published in November, three years after the end of the income year in question. The publications follows the revision rhythm of national accounts.

6.2 Punctuality

These statistics are published according to the announced time of publication in the release calendar.

7 Comparability

The statistic were first introduced in 1903. The tax reform in 1987 changed both income and deduction concepts. From 1987, the numbers were split into personal income, capital income, and deductions instead of gross income and deductions. The taxation structure differs greatly across countries, which makes international comparison difficult.

7.1 Comparability - geographical

The taxation systems differ widely across countries, which makes the comparison difficult because of conceptual and computational differences. The main purpose of national statistics is normally not to accommodate international comparison, but to accommodate each country's own information setup and traditions.

The taxation in Denmark differs widely from all other European countries. In Denmark, contribution to social security schemes constitutes an exceptionally small share of total taxation, whereas income taxes account for more than 60 percent. This is in contrast to most other European countries where the contribution to social security schemes constitute a particular high share of the total taxation and income taxes only constitute a minor percentage. Among the OECD countries, only New Zealand and Australia have a tax structure that is to some extent similar to the Danish one.

7.2 Comparability over time

From when the Danish income tax was first introduced in 1903 and until the tax reform in 1987 the valid principle was that the taxable income – that is gross income minus deductions – was taxed according to the same tax scale. However, with the tax reform in 1987, the uniform tax principle was broken as both income and deduction concepts changed. The concept change makes it very difficult to compare the income taxes before and after the reform in 1987. The current structure for Danish income taxes means that the numbers are split into personal, capital income, and deductions. Before the tax reform, the number were split into gross income and deductions.

For the income years from 1987 - 2016, the assessment of personal income taxes based upon datasets from July just 1½ year after the income year. The datasets from these years are considered final and the final data are not grossed up. From 2017, both preliminary and final data are grossed up.

7.3 Coherence - cross domain

Not relevant for these statistics.

7.4 Coherence - internal

Not relevant for these statistics.

8 Accessibility and clarity

These statistics are published annually in a Danish press release. In the StatBank the figures are published under [Personal income taxes](#).

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

The statistics are published in a Danish press release.

8.5 Publications

Not relevant for these statistics.

8.6 On-line database

Personal income taxation are published in Statbank Denmark in the following tables

- [PSKAT1](#): Taxpayers incomes and taxes by type
- [PSKAT2](#): Income and deduction at assessment by type
- [PSKAT3](#): Taxpayers by type of tax
- [PSKAT4](#): End tax by region and income tax type

8.7 Micro-data access

Statistics Denmark stores the data files from the Danish Tax Agency. It is possible to order datasets based on the material on normal terms of service.

8.8 Other

Not relevant for the statistics.

8.9 Confidentiality - policy

Personal income taxation conforms to Statistics Denmark's [Confidentiality policy](#).

8.10 Confidentiality - data treatment

No confidentiality measures are needed in the data processing of the statistics, as they are published on an aggregated level.

8.11 Documentation on methodology

There are no separate methodology descriptions for this statistic.

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 Government Finances. The contact person is Ida Balle Rohde, tel.: + 45 6124 2485, and e-mail: ILR@dst.dk.