

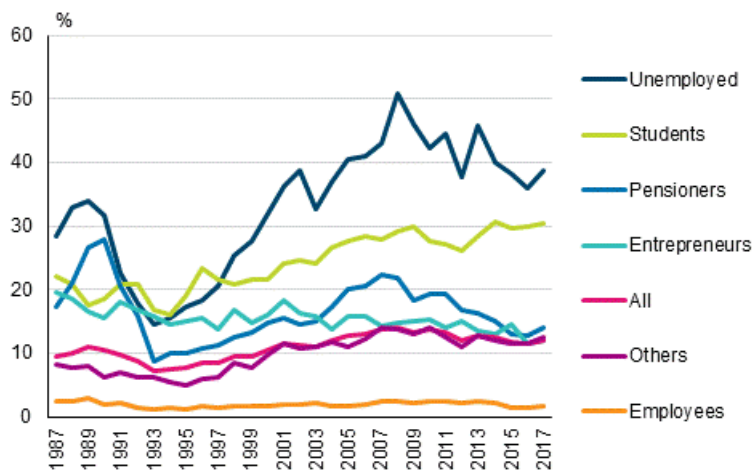
Income distribution statistics 2017

Low income

Unemployed and students are most commonly at risk of poverty

Statistics Finland's income distribution statistics indicate that unemployed and students are most commonly at risk of poverty. Of those having been unemployed for at least six months during the year, almost 39 per cent were members of households at risk of poverty in 2017. Around 31 per cent of students were members of households at risk of poverty. The at-risk-of-poverty rates between population groups have separated from each other during the 30-year review period, especially during the time after the recession in the 1990s. Employees are very rarely at risk of poverty.

At-risk-of-poverty rates by person's socioeconomic group 1987–2017



The relative risk of poverty also varies within the population groups. Among unemployed persons there are differences between those who received earnings-related unemployment allowance and those who received unemployment benefits from the Social Insurance Institution. Of the unemployed who received only earnings-related unemployment allowance during the year, around 15 per cent were at risk of poverty in 2017. One-half of the unemployed who received only basic unemployment benefits from the Social Insurance Institution were at risk of poverty. Of those who during the year received both earnings-related unemployment allowance and basic unemployment benefits from the Social Insurance Institution, 38 per

cent were members of households at risk of poverty. Over one-half of unemployed at risk of poverty have received basic daily allowance or labour market support and no earnings-related security at all.

The risk of poverty among the 1.38 million pensioners also varies. Risk of poverty is rare among former salaried employees, who make up close on one-half of all pensioners. Among former lower-level employees, good eight per cent are at risk of poverty, but among former upper-level employees the number is extremely small. Former farmers have the highest at-risk-of-poverty rate, around 38 per cent. The risk of poverty for those retired from worker occupations and retired entrepreneurs also exceeds the at-risk-of-poverty rate in the total population (12.1%). Around nine out of ten pensioners at risk of poverty receive part of their pension income from national pension and/or guarantee pension.

Structural changes can alter the at-risk-of-poverty rates of the population groups inversely in relation to expectations when the economic situation changes. For example, when the number of unemployed increases, persons who receive earnings-related unemployment allowance are added to the group, and these persons have a higher income level than those who receive unemployment benefits from the Social Insurance Institution. An increase in the number of unemployed decreases the at-risk-of-poverty rate. On the other hand, during an economic boom persons who have been unemployed for a short time are more easily employed and move into the wage and salary earner groups, for example. As a result, the at-risk-of-poverty rate increases for unemployed persons.

The inverse effect is also discernible on the level of total population, where a decrease in average income of total population decreases the share of persons at risk of poverty in the population. This is most clearly visible in the drop in the at-risk-of-poverty rate during the recession in the 1990s. The development of the risk of poverty thus describes the development of the income differential between low and medium income groups, but not the absolute change in the standard of living.

Persons are classified as being at risk of poverty when the household's disposable monetary income per consumption unit¹⁾ is below 60 per cent of the national median income. Dividing the household's income by consumption units means that the income of households of different sizes is converted to correspond to the income level of a one-person household. This makes it possible to compare the livelihood level in households of different sizes.

In 2017, the at-risk-of-poverty threshold was EUR 14,750 per year for one-person households, that is, EUR 1,230 per month. Income refers to the monetary income after taxes and consists of earned income, property income and transfer income. Appendix table 2 of this release contains information about the size of annual income based on which other types of households are defined as being at risk of poverty.

Of persons at risk of poverty, more than one-half are close to the at-risk-of-poverty threshold of 60 per cent, i.e. they belong to the group whose income is 50 to 59 per cent of the median. The situation has been the same during the whole 30-year review period, that is, from 1987 onwards, despite variations in the number of persons at risk of poverty. This group includes households whose income per consumption unit is at least EUR 12,290 but under EUR 14,750 per year or EUR 1,020 to 1,230 per month.

Throughout the 2000s, under 20 per cent of all persons in households at risk of poverty have belonged to the group most at risk of poverty, that is, their income is under 40 per cent of the median. Persons whose household's disposable monetary income is below EUR 9,830 per year, that is, under EUR 820 per month per consumption unit belong to this group.

The middlemost group at-risk-of-poverty, whose income is 40 to 49 per cent of the national median income, is placed between these income groups. The income per consumption unit for those belonging to the group is at least EUR 9,830 but under EUR 12,290 per year (EUR 820 to 1,020 per month). More than one-quarter of persons at risk of poverty belong to this group.

1) The consumption units are based on the so-called OECD's modified scale. One adult in the household is one consumption unit. Other persons in the household aged at least 14 each are 0.5 consumption units and children aged 0 to 13 each are 0.3 consumption units. A household with one adult member is one consumption unit, while a household consisting of spouses and one child aged under 14 together are 1.8 consumption units.

Contents

Tables

Appendix tables

Annex table 1. At-risk-of-poverty indicators 1990-2017.....4

Quality report: Income Distribution Statistics.....5

Appendix tables

Annex table 1. At-risk-of-poverty indicators 1990-2017

	1990	1995	2000	2005	2013	2014	2015	2016	2017
Median income, EUR	19,090	17,060	18,770	22,130	24,230	24,050	23,970	24,230	24,580
At-risk-of-poverty threshold, EUR	11,450	10,240	11,260	13,280	14,540	14,430	14,380	14,540	14,750
Median income of persons at risk of poverty, EUR	9,840	8,670	9,710	11,380	12,490	12,500	12,380	12,530	12,650
Poverty gap, EUR	1,620	1,560	1,550	1,900	2,050	1,930	2,010	2,000	2,090
Poverty gap, %	14.1	15.3	13.8	14.3	14.1	13.4	13.9	13.8	14.2
At-risk-of-poverty rate	10.5	7.6	10.5	12.7	12.8	12.5	11.7	11.5	12.1
Persons at risk of poverty	521,000	386,000	534,000	656,000	690,000	674,000	634,000	623,000	654,000

Quality report: Income Distribution Statistics

1. Relevance of statistical information

The annually compiled, sample-based income distribution statistics describe the amount of and the change in the income of households and economically active people, their income structure and income distribution in Finland. Households' income development is monitored as longer time series. The time series data of the income distribution statistics are annually made comparable retrospectively. The first actual income distribution statistics were compiled in 1977.

The data content of the income distribution statistics is based on international recommendations on income distribution statistics¹⁾. The data are households' gross income, i.e. wages and salaries, entrepreneurial and property income and current transfers received, as well as current transfers paid. The disposable monetary income, which has been the key concept in the income distribution statistics since 2011, is formed from these income components. The data corresponds with the income concept (see 6 Comparability of statistics) of the European Union Statistics on Income and Living Conditions (EU-SILC)

In the income distribution statistics, Statistics Finland publishes data on households' livelihood, income differentials, and risk of poverty by population group on its Internet pages. Data are reported, for example, by households' level of income, socio-economic status, stage in life, and age.

The income distribution statistics also contain data on debts, housing, housing expenditure and other factors that have a bearing on the subsistence of households, and on the adequacy of subsistence. Statistics Finland and the Statistical Office of the European Union, Eurostat regularly publish data on their web pages in various connections.

An annual service set for research use is made based on the basic data of the income distribution statistics. The service set on income distribution is used in public administration, universities and research institutes to study and develop income distribution and social security benefits. A special form of research use of the service set is microsimulation. In addition to the service set of the income distribution statistics, special compilations or assignments can be compiled from the basic data upon request.

The data of the income distribution statistics are commonly used research data in international comparable surveys. In connection with the data collection for the income distribution statistics, data for Eurostat's European Union Statistics on Income and Living Conditions, EU-SILC, are collected (Regulation (EC) No 1177/2003 of the European Parliament and of the Council). Research use of these data is lively through Eurostat. The data of the income distribution statistics are delivered to the international database of the Luxembourg Income Study (LIS) at set intervals. The database is in worldwide research use. Data are also regularly delivered to the OECD and to the international EUROMOD microsimulation research.

2. Methodological description of the survey

The statistics are based on annually collected sample data. Basic data are collected by combining data collected from households by interviews and register data. A majority of classification data on households and the income data that are not available in registers have been collected by interviews.

Interviews

Statistics Finland's Data Collection department is responsible for the interviews. The interviews are computer-assisted and conducted with the help of Blaise questionnaire software mainly as telephone interviews. The interview language is either Finnish, Swedish or English (from statistical year 2014 onwards) depending on the interviewee's choice. The average duration of an interview was roughly 29 minutes in the 2017 survey.

1) OECD (2013) OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth, OECD Publishing <http://dx.doi.org/10.1787/9789264194830-en>.

Registers

A majority of the survey data come from administrative registers and statistical registers. Register sources of the income distribution statistics are:

- The Population Information System of the Population Register Centre and Statistics Finland's database on the population of Finland
- The taxation database of the Tax Administration
- The Social Insurance Institution of Finland's registers of pension insurance, health insurance compensation and rehabilitation, registers of child maintenance allowances, financial aid for students, housing allowances and social assistance
- The National Institute for Health and Welfare's register of social assistance
- The register of pension contingency of the Finnish Centre for Pensions
- Statistics Finland's Register of Completed Education and Degrees
- The State Treasury's database on the military injuries indemnity system
- The Education Fund's data files
- The farm register of the Information Centre of the Ministry of Agriculture and Forestry (TIKE)
- Statistics Finland's Business Register
- The Financial Supervision Authority's data (earnings-related unemployment allowances)

Population

The target population consists of private households permanently living in Finland at the end of the statistical year (31 December 2017), or the so-called household population. The following groups are excluded:

- Those without permanent address
- Institutional population (for example, those living in old people's homes, care institutions, prisons or hospitals over long term)
- Those residing permanently abroad, and also those residing abroad for more than a year if their household in Finland considers that the person was not part of the household during the reference year
- Asylum seekers and those temporarily resident in Finland.

Conscripts are regarded as part of the population in these statistics. The persons belonging to each household are determined based on the interview and the situation at the end of the statistical reference year.

Sample design

The income distribution statistics are based on a rotating panel design. The households participate in the survey in four consecutive years, so the data for the statistical reference year consist of households that have been included in the sample between one and four rounds (Table 2). Until 2008, the sample of the income distribution statistics contained two panels, so the sample included households participating in their first and second rounds. When moving from two to four survey rounds, the initial sample was decreased so that the first round had 5,000 households starting from the 2009 statistics instead of the previous 7,500.

The sampling design of the income distribution statistics is a two-phase stratified sampling. In the first phase, a so-called master sample is formed by selecting 50,000 target persons who are aged 16 or over by means of systematic sampling in Statistics Finland's population database²⁾ (exceptionally 100,000 in 2015). The household-dwelling units of target persons included in the sample are formed by combining the persons living permanently at the same address with the target person with the help of the code for place of domicile. In the second phase, the actual sample is selected from the master sample, or 5,000 household-dwelling units. The probability of a household being included in the sample depends not only on the stratification criteria but also on the number of household members who are aged 16 or over. The strata are created based on the tax data of the year preceding the statistical reference year. The strata are formed based on the household-dwelling unit's income subject to state tax and the socio-economic groups of the household

2) Starting from 2003, the age limit has been 16 years instead of the earlier 15 years. This solution was reached when applying the implementation practices required by the national income distribution statistics and the Income and Living Conditions survey (EU-SILC).

members³⁾. The socio-economic groups formed based on the data from the tax register are wage and salary earners, farmers, other self-employed persons, pensioners and others. In 2014, the number of strata was reduced to twelve by combining those without a tax record with the group other low income 1. The change does not affect the comparability of data. In defining the sample size by stratum, or in sample allocation, the special requirements of the income distribution survey are considered. Entrepreneurs and those with high income have a higher probability than others of being included in the sample. The sample allocation was changed starting from 2007 by increasing the number of persons in low income categories and pensioners. The change was based on the need to improve the efficiency of estimating low income indicators, such as the risk-of-poverty rate.

When the income distribution statistics moved to a four-panel rotating sample in 2009, additional samples of target persons aged 16 have annually been selected for the second to fourth survey rounds. In 2009, exceptionally additional samples of target persons aged 17 were also selected for the third and fourth survey rounds and aged 18 for the fourth survey round. Depending on the survey round, the target persons selected for the additional samples participate in the survey for one to three rounds. The additional samples ensure the representativeness of the statistics in terms of the age distribution of the household population.

Weighting coefficients

Households and persons whose participation has been approved receive a coefficient with which their data are raised to represent the data of the basic target population. First, design weights are formed for households relying on the probability of the household being included in the sample. Next, a non-response correction is performed for the design weights of the approved sample by multiplying them by the inverse of the share of households having responded acceptably for each stratum. These weights corrected for non-response based on sample level data are calibrated using the CALMAR macro to correspond with the known key distributions of the population. The procedure aims at reducing the bias caused by the selectivity on non-response and produce as exact estimates as possible for the main income variables. In the calibration of the weights for the 2017 material, the following data were used:

- Region (the division of regions, in which Helsinki and other parts of the Helsinki Metropolitan area are shown separately; statistical groupings of municipalities)
- Size of municipality of residence for the first survey round and household size for survey rounds 2 to 4 (in 2017; prior to 2017 whole sample was calibrated to size of municipality or residence)
- Age and gender groups of members
- Educational level of persons aged 16 or over (from 2016 onwards; see [quality report for 2016](#))
- Total sums of the main income items: wages and salaries, entrepreneurial and property income, unemployment allowances (basic unemployment allowance and labour market allowance, earnings-related share), pensions, interest on housing loans, number of income recipients (earnings-related unemployment allowance, wage and salary income, pension income).
- number of persons in dwelling population living in dwelling units at risk of poverty, register based income concept (from 2015 onwards)

3. Correctness and accuracy of data

Table 1 presents data on the sample and non-response of the 2017 income distribution statistics' first survey round by stratum. The number in the stratum indicates the income category, for example, wage and salary earners have been divided into four categories based on income subject to state taxation (1=lowest, 4=highest income category).

3) Since 2003, the strata have been determined based on the socio-economic group and income bracket of the target person's household, when previously the classification was made based on the target person. The change in the stratum classification is based on tests, where the classification based on households was found to be more efficient in terms of estimation than the classification based on a person.

Table 1. First round sample of the 2017 income distribution statistics by stratum

	Size of actual cross sample	Gross sample	Selection ratio, %	Approved households	Non-response	Overcoverage
Stratum						
Employees 1	10,579	821	7.7	417	396	8
Employees 2	8,059	652	8.0	375	271	6
Employees 3	6,752	569	8.4	348	216	5
Employees 4	3,390	500	14.7	291	203	6
Self-employed persons 1	1,597	400	25.0	223	173	4
Self-employed persons 2	748	299	39.9	175	121	3
Farmers 1	584	199	34.0	144	54	1
Farmers 2	484	183	37.8	122	59	2
Pensioners 1	8,096	501	6.1	267	209	25
Pensioners 2	5,509	400	7.2	267	123	10
Others 1	3,520	345	9.8	147	190	8
Others 2	471	131	27.8	74	54	3
Total	49,789	5,000	10.0	2,850	2,069	81

Data on the size of the actual sample, respondents, non-response and overcoverage are presented in Table 2. In 2017, the total sample size was 13,072 households of which some proved not to belong to the target population during the interview. Such overcoverage cases are, for example, households whose target person has moved permanently abroad, been institutionalised or has died. After removing the overcoverage, the net sample was 12,911 households.

For first-time respondents, the non-response was 42.1 per cent. The non-response for households participating in the survey for the second time was 17.6 per cent, for third time respondents 12.2 per cent and for fourth time respondents 7.1 per cent. The non-response for households who were included in the survey for the second or more times has in the table been calculated using the condition that the household has participated in the survey in previous years. The households remaining as non-response are not included in the next interview rounds of the survey. The net non-response of the entire sample (all rounds) was 23.8 per cent in 2017. The number of households approved for the data of the 2017 income distribution statistics totalled 9,832 households. These households had a total of 23,879 persons.

Table 2. Sample size and non-response of the income distribution statistics 2017

	Survey round				
	Total sample	1	2	3	4
Gross sample, households	13,072	5,000	2,983	2,630	2,459
Overcoverage	161	81	25	32	23
Net sample	12,911	4,919	2,958	2,598	2,436
Non-response	3,079	2,069	521	317	172
- Refusals	2,079	1,359	394	216	110
- Non-contacts	810	589	97	72	52
- Other reason	190	121	30	29	10
Approvals	9,832	2,850	2,437	2,281	2,264
Net non-response, %	23.8	42.1	17.6	12.2	7.1

Table 3 examines the division of non-response by stratum in the first round of the survey in 2008 to 2017. The non-response percentages have been calculated at sample level from unweighted figures. In 2017, non-response was higher than in the year before.

In addition to non-response (unit non-response), the quality of the results is also affected by partial non-response (item non-response) of individual interview questions. Interest income data (interest income subject to the Act on Withholding Tax) have more significant partial non-response. The missing interest income data are corrected with the so-called hot deck imputation method.

Table 3. Unit non-response (%) of the income distribution statistics in 2008 to 2017, the first round

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Employees 1	32.2	35.3	32.7	38.6	40.1	37.8	42.6	41.8	45.2	48.7
Employees 2	26.8	31.4	27.2	35.3	28.9	36.7	36.0	40.1	42.5	42.0
Employees 3	26.8	27.3	26.9	28.6	29.0	33.5	32.8	37.1	39.6	38.3
Employees 4	30.3	28.4	23.5	32.8	27.1	37.9	34.1	32.3	37.6	41.1
Self-employed persons 1	28.5	30.7	31.2	34.1	35.8	41.6	36.7	35.7	46.5	43.7
Self-employed persons 2	30.1	26.8	31.0	28.9	30.2	31.3	37.4	36.1	37.0	40.9
Farmers 1	16.1	21.7	17.7	21.7	22.2	24.7	22.7	26.8	27.7	27.3
Farmers 2	13.9	13.3	15.8	23.5	16.1	26.2	19.7	19.4	29.7	32.6
Pensioners 1	27.3	29.9	24.7	35.7	30.4	35.0	35.3	34.6	36.2	43.9
Pensioners 2	20.6	19.7	21.4	24.0	25.6	26.5	22.4	22.6	25.6	31.5
Others 1	41.4	45.6	38.3	49.8	48.3	48.8	52.8	50.4	56.3	56.4
Others 2	28.0	32.0	31.8	33.8	34.6	40.2	36.8	37.6	36.2	42.2
No tax data	66.7	56.8	71.7	71.7	71.4	65.1
Total	28.3	29.9	28.0	33.7	32.0	35.9	35.6	36.1	39.9	42.1

The result figures or estimates of the income distribution statistics contain random variation caused by sampling. The size of this random variation can be assessed with the help of the standard error of the estimate. Sample size and variation in the variables' values affect the magnitude of the standard error. In groups where the sample contains a few observations, the standard error can be large and thus the results are uncertain.

No income data are published in the tables of the statistics if the sample of the group has contained fewer than 30 households or the tables by income earner contains fewer than 30 income earners. In the tables that describe the structure of decile groups and income groups, the numbers are recorded in parenthesis if the sample contains fewer than ten households or income earners. With the standard error, a confidence interval can be calculated for each estimate, which gives the actual value of the basic sample at certain probability.

Besides non-response and random variation, the quality of the results is also affected by coverage errors (the frame population differs from the basic target population) and measurement errors (the measured value of the result variable differs from its actual value). Some of these error sources can cause systematic errors. Systematic errors can be estimated by comparing the estimates with the data concerning the entire population available from registers and with corresponding data from other statistics. Comparisons are conducted annually and you can ask for them from Statistics Finland.

Table 4. Standard errors and confidence intervals of at-risk-of-poverty rate in 1987 to 2017

Year	At-risk-of-poverty rate %	Lower limit	Upper limit	Standard error
1987	9.6	9.0	10.2	0.31
1988	10.0	9.4	10.6	0.29
1989	10.9	10.3	11.4	0.28
1990	10.5	10.0	11.0	0.27
1991	9.8	9.3	10.3	0.27
1992	8.8	8.3	9.4	0.28
1993	7.2	6.7	7.8	0.30
1994	7.4	6.8	8.0	0.30
1995	7.6	7.0	8.3	0.31
1996	8.5	7.8	9.2	0.35
1997	8.5	7.8	9.1	0.34
1998	9.6	8.9	10.4	0.38
1999	9.5	8.8	10.2	0.37
2000	10.5	9.7	11.2	0.39
2001	11.6	10.8	12.4	0.41
2002	11.3	10.5	12.1	0.40
2003	11.1	10.4	11.9	0.37
2004	11.9	11.2	12.5	0.34
2005	12.7	11.9	13.4	0.37
2006	13.1	12.3	13.8	0.39
2007	13.8	13.0	14.6	0.40
2008	13.9	13.0	14.7	0.42
2009	13.2	12.4	14.0	0.40
2010	13.7	12.9	14.6	0.42
2011	13.2	12.5	14.0	0.39
2012	11.9	11.1	12.6	0.38
2013	12.8	12.1	13.6	0.40
2014	12.5	11.7	13.3	0.41
2015	11.7	10.9	12.5	0.40
2016	11.5	10.6	12.3	0.44
2017	12.1	11.2	12.9	0.44

Table 5. Ability to make ends meet (%), confidence intervals and standard errors in 2011 to 2017

		Making ends meet %	Lower limit	Upper limit	Standard error
2010	with great difficulty	2.5	2.1	3.0	0.21
	with difficulty	4.8	4.2	5.3	0.29
	with some difficulty	17.2	16.2	18.2	0.50
	fairly easily	35.3	34.1	36.6	0.62
	easily	25.3	24.2	26.3	0.55
	very easily	14.2	13.3	15.0	0.42
2011	with great difficulty	2.3	1.9	2.6	0.18
	with difficulty	4.8	4.2	5.3	0.29
	with some difficulty	15.9	15.0	16.8	0.46
	fairly easily	33.1	31.9	34.2	0.59
	easily	26.7	25.7	27.8	0.53
	very easily	16.8	15.9	17.7	0.45
2012	with great difficulty	2.2	1.8	2.5	0.18
	with difficulty	4.7	4.2	5.2	0.26
	with some difficulty	16.9	16.0	17.8	0.48
	fairly easily	34.3	33.2	35.4	0.56
	easily	26.1	25.1	27.1	0.51
	very easily	15.4	14.7	16.2	0.38
2013	with great difficulty	2.7	2.2	3.1	0.22
	with difficulty	4.7	4.1	5.2	0.28
	with some difficulty	18.0	17.1	19.0	0.49
	fairly easily	36.9	35.7	38.0	0.58
	easily	23.6	22.6	24.6	0.50
	very easily	13.6	12.9	14.3	0.38
2014	with great difficulty	2.5	2.1	2.9	0.21
	with difficulty	4.4	3.9	5.0	0.27
	with some difficulty	17.3	16.4	18.3	0.48
	fairly easily	34.8	33.6	36.0	0.59
	easily	25.1	24.1	26.2	0.52
	very easily	15.1	14.4	15.9	0.38
2015	with great difficulty	2.3	1.9	2.7	0.21
	with difficulty	4.6	4.0	5.2	0.28
	with some difficulty	17.5	16.5	18.4	0.50
	fairly easily	32.5	31.4	33.7	0.60
	easily	25.6	24.6	26.7	0.53
	very easily	16.7	15.9	17.6	0.42
	with great difficulty	2.3	1.9	2.7	0.21
	with difficulty	4.3	3.8	4.9	0.28
	with some difficulty	18.1	17.1	19.1	0.52
	fairly easily	37.8	36.6	39.0	0.63
	easily	23.4	22.4	24.5	0.52
	very easily	13.3	12.5	14.0	0.39
2017	with great difficulty	2.3	1.9	2.6	0.20
	with difficulty	3.8	3.3	4.3	0.25
	with some difficulty	15.5	14.5	16.5	0.50
	fairly easily	33.6	32.4	34.8	0.62
	easily	25.0	23.9	26.1	0.56
	very easily	19.0	18.0	19.9	0.48

4 Timeliness and punctuality of published data

The income distribution statistics are made yearly. The last register data required for statistical production are available around 11 months after the end of the statistical reference year. Preliminary data are completed around 12 months after the end of the statistical reference year and final data are released around 15 months after the end of the statistical reference year.

5. Accessibility and clarity of data

The preliminary and final data of the income distribution statistics are published on Statistics Finland's Internet pages as electronic releases and reviews in the Official Statistics of Finland's Income and Consumption publication series and as StatFin database tables. The data can be found at tilastokeskus.fi/til/tjt/index_en.html.

If more detailed statistics than the data released on the web pages are needed, they can be ordered as a chargeable assignment from the compilers of the statistics by e-mail toimeentulo.tilastokeskus@stat.fi or by telephone.

There are service files designed for research use available from the statistics. The data are chargeable and require an application for a user licence. The database of the income distribution statistics provides good possibilities for making various analyses and reports.

6. Comparability of statistics

Housing cost concept

The housing cost concept follows the definition of the European Union Statistics on Income and Living Conditions (EU-SILC). The data are used for international comparative statistics for which data are derived based on housing costs and income (see [Eurostat](#)).

Income concept

The main income concept of the income distribution statistics is *disposable monetary income* (excluding sales gains) according to the European Union Statistics on Income and Living Conditions (EU-SILC). The concepts are by definition identical apart from fringe benefits included in wages and salaries. They are included in income in the income distribution statistics but not in the European Union Statistics on Income and Living Conditions except a benefit for using a company car. The income concept used in the OECD's income distribution database is the same as in the income distribution statistics, i.e. disposable monetary income (excluding sales gains).

Disposable monetary income (excluding sales gains) is an internationally comparable income concept that does not include taxable realised capital gains (sales gains) nor taxes paid on them. Such income has been updated retrospectively in the statistics' time series data starting from 1987.

The more extensive primary income concept *disposable income* previously used in the income distribution statistics is still retained in statistical compilation and database tables. It includes imputed housing income, as well as sales gains and taxes paid on them. *Disposable monetary income (incl. sales gains)* corresponds with the previously used money income concept. It includes sales gains and taxes paid but not imputed income items. This income concept is also included in statistical compilation and in part of the database tables.

Alternative income concepts are available from the basic data for statistical and research purposes and they are reported in some of the income distribution statistics publications. They are, however, not suited for international comparisons.

The data presented in the releases of the income distribution statistics are based on annually updated time series that try to take into account the changes that have taken place in the income data of the income distribution statistics. The comparability of the income distribution statistics' time series is good for 1993 to 2017 and for the main income items relatively good backwards from 1993 to the older statistical years.

The following changes have taken place in income data that affect the comparability of the data. They are:

- The calculation method of forest income was revised in 2014. Sales gains from forests were previously based on the Tax Administration's annual tax return data. Costs directed at sales gains from forests were derived with a mechanical calculation method. In the 2014 statistics, sales gains from forests were based on final taxation data like other entrepreneurial income, where the costs directed at sales gains from forests approved by the tax authority were clearly higher than what was previously calculated for the statistics. The change affects the income of farmer households in particular. More about the effects of the calculation method can be found in the Income Distribution 2014 publication on income differentials between population subgroups.
- Households' disposable monetary income differs from the monetary income concept used in the income distribution statistics in 2010 and in preceding statistical reference years in that the data do not include taxable transfer gains. On the other hand, the data do, more extensively than before, include current transfers paid to other households that are of a regular nature and binding (child support).
- Imputed dwelling income from owner-occupied dwellings is still produced as a separate income component and it is still included in households' disposable income (but not in monetary income). In the 2006 statistics, the calculation method of housing income was renewed by taking into account, on the one hand, uniform practices with Statistics Finland's other statistics (especially the Household Budget Survey and National Accounts) and on the other hand, the requirements of the regulation concerning the European Union Statistics on Income and Living Conditions (EU-SILC). The main changes are related to revisions in gross rent strata calculated for sample households with the stratum method and handling of depreciations related to owner-occupied dwellings. In the strata, gross rent based on the statistical grouping of municipalities has been replaced with municipality-specific data and, in larger municipalities, with sub-area data (since 2012, the gross rent by sub-area has been used for more municipalities than before). Stratum-specific gross rent values are still based on the average rents of new and old tenancies of non-subsidised dwellings in Statistics Finland's rent statistics but the rent values of strata with low numbers of observations have been revised with the selling prices of old dwellings in housing companies. Depreciations are not subtracted from the dwelling income of those living in detached houses. (See Income distribution statistics, concepts and definitions, dwelling income or imputed net rent). Dwelling income calculated using the new method has been updated retrospectively in the statistics' time series data starting from 1993 so the income concepts are comparable in this respect when the time series data of the income distribution statistics are used as the data source.
- Starting from the income distribution statistics for 2006, current transfers received between households have no longer been included money or other gifts received by households. The reason is coherence with the income concept of the European Union Statistics on Income and Living Conditions (EU-SILC). The new calculation method decreases the households' average disposable income by around EUR 150 per household.
- In 2006, the taxation of forest income shifted to taxation based on sales income. Therefore, the handling of forest income also changed in the income distribution statistics. Income from forestry was in 2006 to 2013 principally based on the Tax Administration's annual tax return data and complementing data were no longer inquired in the interviews. The costs of forestry were estimated as a percentage share of forest sales income, while previously they were calculated using a regression model based on interview data.
- The comparability of the income concepts of the income distribution statistics is also made harder by the 2005 dividend tax renewal, where the system of corporation tax credit was abandoned. Before the renewal, corporation tax credit was considered income in dividend, factor and gross income. Because the corporation tax credit was also included in current transfers paid, the renewal does not affect the comparability of disposable income. The changes caused by the tax renewal have been revised in the time series data of the income distribution statistics for 1993 to 2004.

Classifications and methods

The classification of major regions has been in use in the income distribution statistics since 2003 and it corresponds to the NUTS 2 -classification of European Union (Regulation of the European Parliament and the Council 1059/2003). NUTS 2 -classification was revised in 2011 (Commission Implementing Regulation No 31/2011). The revision had structural effects on the national classification of major regions. New classification of major regions was implemented in income distribution statistics in 2012.

Since 2011, income distribution statistics have used the Classification of Occupations 2010. It is based on the revision of the international classification of occupations ISCO-08. The classifications of occupations is used to help determine the classification of socio-economic groups. The effect of the revision on time series data by socio-economic group published in the income distribution statistics is insignificant.

7. Coherence and consistency/uniformity

The **Total statistics on income distribution** compiled from administrative registers describes the annual income of register households (household-dwelling units) and their division especially from a regional viewpoint. The household-dwelling unit (so-called register household) used as the statistical unit differs slightly from the household-dwelling unit concept of the income distribution statistics. Because the income concept of the total statistics on income distribution is only based on register data it does not include imputed income items and certain income items on which data can only be collected through interviews (e.g. imputed rent, interest income liable to tax at source and current transfers between households). The concepts of the total statistics on income distribution in terms of, for example, income, do not fully correspond with international recommendations. The data of the coherence of statistics may also differ for reasons related to sampling and production methods.

There are no considerable conceptual differences between the income distribution statistics and the **Household Budget Survey**. Both follow the definition of disposable income that is accordant with international recommendations. The housing costs in the income distribution statistics and the consumption expenditure of housing in the Household Budget Survey are congruent. The data of the Household Budget Survey contain all consumption expenditure related to the housing costs of the household's actual dwellings and free-time residences (incl. imputed consumption). The statistics use the gross rent principle and the Classification of Individual Consumption by Purpose (COICOP-HBS). In addition to the above-mentioned factors, the data of the coherence of statistics may differ for reasons related to sampling and production methods.

The statistics on taxable income that are based on tax data, provide data on natural persons' taxable income, deductions and taxes. The topic area it describes is less extensive than that of the income distribution statistics. The statistics on taxable income do not provide data by household, the statistical unit is income earner or married couple. Some entrepreneurial income and property income (e.g. interest income liable to tax at source) and current transfers (e.g. some national pensions and interests based on accident insurance, pensions based on the Military Injuries Act, housing allowance, social assistance and child benefits) also remain outside its scope.

The income distribution statistics describe the income and current transfers of the household sector and are thus an extension of **the household sector's income and use of income accounts of the national accounts**. When comparing the income sums of the income distribution statistics for the whole country with the items of the national accounts' income and use of income accounts, the differences in defining the sector, in certain definitions, and in the compilation methods of the statistics should be noted. Due to the differences, the figures of the national accounts and income distribution statistics on, for example, annual changes in households' disposable income may differ considerably from one another.

Private households form the basic population of the income distribution statistics. In the national accounts, the household sector also includes so-called institutional households. In 2003, the time series of national accounts were revised so that the household sector now also includes housing companies to the extent that households are owners of dwellings in housing companies (i.e. to a great extent).

Inquiries

Kaisa-Mari Okkonen 029 551 3408
Director in charge:
Jari Tarkoma

toimeentulo.tilastokeskus@stat.fi
www.stat.fi

Source: Income Distribution Statistics 2017, Statistics Finland