

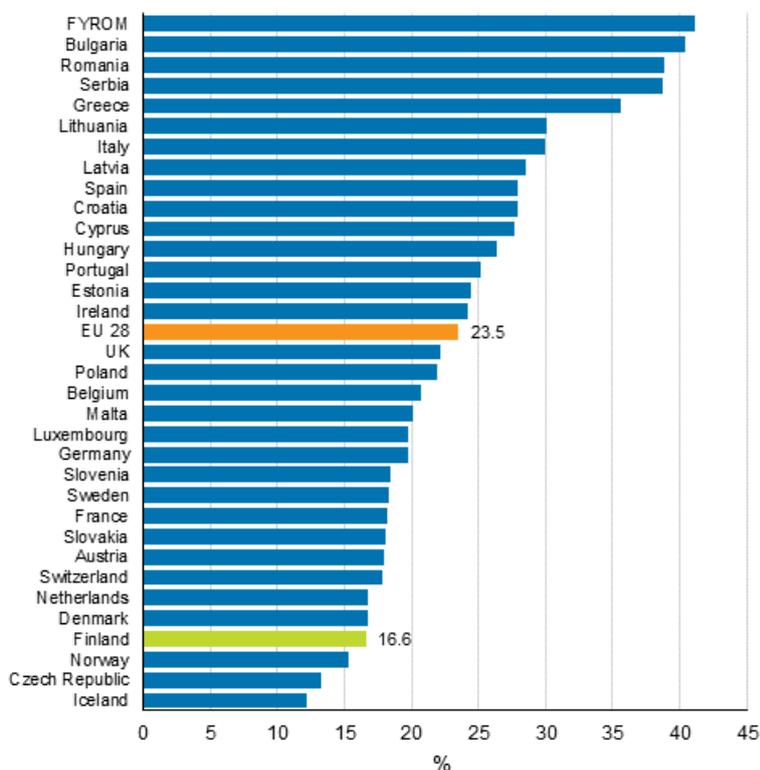
Income distribution statistics 2016

Income differentials and livelihood (international comparison)

Number of EU citizens at risk of poverty or social exclusion is 118 million

In all, 23.5 per cent of the citizens of the European Union's 28 member states were at risk of poverty or social exclusion in 2015. In Finland, 16.6 per cent of the household population were at risk of poverty or social exclusion, around 896,000 persons. These data derive from the results of the European Union Statistics on Income and Living Conditions, where Finland's data are based on Statistics Finland's income distribution statistics.

Share of persons living at risk of poverty or social exclusion (AROPE) in EU countries and certain other European countries in 2015

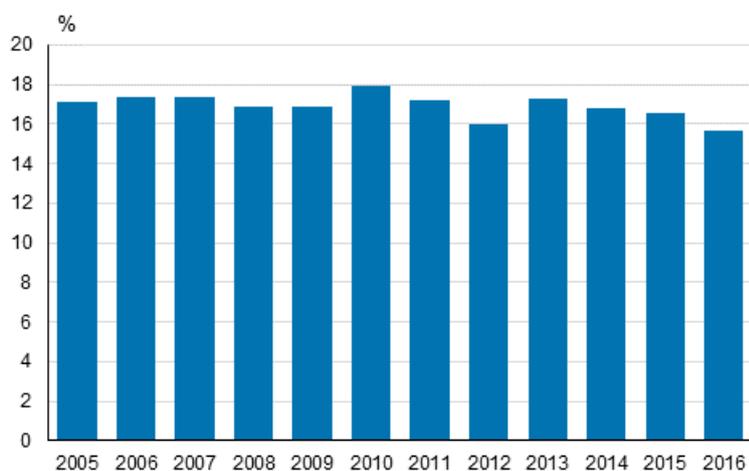


Source: Eurostat, European statistics on income and living conditions (EU-SILC 2016, income reference year 2015, except for the United Kingdom 2016). Data are presented by income reference year but on the Eurostat website the corresponding data are found by the year of data collection (income reference year + 1). Data extracted on 25 April 2018.

The risk of poverty or social exclusion in Europe was highest in Macedonia, Bulgaria, Romania and Serbia, lowest in Iceland. Finland's share is the fourth lowest. People at risk of poverty or social exclusion include low income earners, those who are severely materially deprived or living in a household with low work intensity. In a majority of countries, low income earners are most common. In all, 17.3 per cent of the population in the EU Member States belonged to low income households in 2015.

For Finland, there are data available on persons at risk of poverty or social exclusion already from 2016. In all, 15.7 per cent of the population were at risk of poverty or social exclusion in 2016, that is, 849,000 persons. This is the lowest share in the whole 11-year reference period. The share of persons at risk of poverty or social exclusion has varied in Finland between 15.7 and 17.9 per cent in 2005 to 2016. A majority of the share of persons at risk of poverty or social exclusion in Finland is explained with low income earners: around three out of four persons at risk of poverty or social exclusion are low income earners.

Share of persons at risk of poverty or social exclusion in Finland in 2005 to 2016



Source: Eurostat, European statistics on income and living conditions (EU-SILC). Data are presented by income reference year but on the Eurostat website the corresponding data are found by the year of data collection (income reference year + 1).

The so-called AROPE indicator (At Risk of Poverty or Social Exclusion) that measures the risk of poverty or social exclusion is part of the monitoring of the objective of the Europe 2020 Strategy. It aims to reduce the number of persons living at risk of poverty or social exclusion in the EU by 20 million by 2020 compared with 2008, when there were 116 million people at risk of poverty or social exclusion. Compared with 2015, attaining the target would require lifting around 22 million persons out of the risk of poverty or social exclusion. Finland's national target is to reduce the number of persons living at risk of poverty or social exclusion to around 770,000, which is 150,000 fewer than in 2008. Compared with the 2016 level (849,000), attaining the target would thus require lifting another around 80,000 persons out of the risk of poverty or social exclusion.

Persons are classified as being at-risk-of-poverty when they live in a household, whose disposable monetary income per consumption unit is below 60 per cent of the national median income. Persons living in a household with low work intensity are all persons aged under 60, whose household's work input is below 20 per cent of the household's potential work input in the survey year. Potential work input refers to the combined theoretical working months of the household members aged between 18 and 59 (excl. non-independent young people aged between 18 and 24) per year. Persons whose household suffers deprivation measured by at least four indicators out of nine are considered severely materially deprived. The indicators are experiencing payment difficulties, difficulty coping with unexpected financial expenses

or that the household cannot afford a telephone, washing machine, television, car, protein-rich meal every other day, one week's holiday per year outside the home or keep their home warm enough.

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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 35 minutes in the 2016 survey.

1)

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 and housing allowances
- 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 2016), 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 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

2)

3)

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 2016 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
- Age and gender groups of members
- 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)

3. Correctness and accuracy of data

Table 1 presents data on the sample and non-response of the 2016 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).

Table 1. First round sample of the 2016 income distribution statistics by stratum

	Size of actual cross sample	Gross sample	Selection ratio, %	Approved households	Non-response	Overcoverage
Stratum						
Employees 1	10,553	820	7.7	443	366	11
Employees 2	8,416	650	7.7	372	275	3
Employees 3	10,540	1,067	22.2	646	407	14
Self-employed persons 1	1,705	400	23.4	209	182	9
Self-employed persons 2	760	301	39.6	189	111	1
Farmers 1	664	200	30.1	141	54	5
Farmers 2	565	183	32.3	128	54	1
Pensioners 1	7,784	500	6.4	298	169	33
Pensioners 2	5,373	402	7.4	290	100	12
Others 1	3,138	346	11.0	146	188	12
Others 2	457	131	28.6	83	47	1
Total	49,955	5,000	10.0	2,945	1,953	102

Data on the size of the actual sample, respondents, non-response and overcoverage are presented in Table 2. In 2016, the total sample size was 13,396 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 13,188 households.

For first-time respondents, the non-response was 39.9 per cent. The non-response for households participating in the survey for the second time was 17.1 per cent, for third time respondents 11.9 per cent and for fourth time respondents 6.8 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 22.6 per cent in 2016. The number of households approved for the data of the 2016 income distribution statistics totalled 10,210 households. These households had a total of 24,818 persons.

Table 2. Sample size and non-response of the income distribution statistics 2016

	Survey round				
	Total sample	1	2	3	4
Gross sample, households	13,396	5,000	3,169	2,794	2,433
Overcoverage	208	102	39	38	29
Net sample	13,188	4,898	3,130	2,756	2,404
Non-response	2,978	1,953	534	328	163
- Refusals	2,015	1,304	378	220	113
- Non-contacts	745	529	106	74	36
- Other reason	218	120	50	34	14
Approvals	10,210	2,945	2,596	2,428	2,241
Net non-response, %	22.6	39.9	17.1	11.9	6.8

Table 3 examines the division of non-response by stratum in the first round of the survey in 2007 to 2016. The non-response percentages have been calculated at sample level from unweighted figures. In 2016, 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 2007 to 2016, the first round

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Employees 1	27.7	32.2	35.3	32.7	38.6	40.1	37.8	42.6	41.8	45.2
Employees 2	23.9	26.8	31.4	27.2	35.3	28.9	36.7	36.0	40.1	42.5
Employees 3	23.8	26.8	27.3	26.9	28.6	29.0	33.5	32.8	37.1	39.6
Employees 4	23.1	30.3	28.4	23.5	32.8	27.1	37.9	34.1	32.3	37.6
Self-employed persons 1	26.2	28.5	30.7	31.2	34.1	35.8	41.6	36.7	35.7	46.5
Self-employed persons 2	28.4	30.1	26.8	31.0	28.9	30.2	31.3	37.4	36.1	37.0
Farmers 1	16.4	16.1	21.7	17.7	21.7	22.2	24.7	22.7	26.8	27.7
Farmers 2	15.0	13.9	13.3	15.8	23.5	16.1	26.2	19.7	19.4	29.7
Pensioners 1	29.0	27.3	29.9	24.7	35.7	30.4	35.0	35.3	34.6	36.2
Pensioners 2	16.7	20.6	19.7	21.4	24.0	25.6	26.5	22.4	22.6	25.6
Others 1	39.4	41.4	45.6	38.3	49.8	48.3	48.8	52.8	50.4	56.3
Others 2	27.1	28.0	32.0	31.8	33.8	34.6	40.2	36.8	37.6	36.2
No tax data	69.6	66.7	56.8	71.7	71.7	71.4	65.1	.	.	.
Total	25.6	28.3	29.9	28.0	33.7	32.0	35.9	35.6	36.1	39.9

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 2016

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

Table 5. Ability to make ends meet (%), confidence intervals and standard errors in 2011 to 2016

		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
2016	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

Table 6. Standard errors of households' income by socio-economic group in 2016

Socio-economic group	Households, 1 000		Wages, salaries and entrepreneurial income		Income from property		Current transfers received		Current transfers paid		Disposable cash income	
	Mean	Standard error, %	Mean	Standard error, %	Mean	Standard error, %	Mean	Standard error, %	Mean	Standard error, %	Mean	Standard error, %
All households	2 677	0,6	32 907	1,0	3 047	5,7	15 352	1,0	13 025	1,0	38 281	0,7
Upper-level employees	415	2,5	82 148	1,5	3 232	8,0	6 443	4,2	29 820	2,0	62 003	1,3
Lower-level employees	435	2,8	48 230	1,4	1 020	9,2	7 131	3,8	14 298	1,7	42 083	1,2
Manual workers	421	2,9	46 241	1,5	688	11,1	7 019	3,7	13 094	1,9	40 854	1,2
Self-employed in agriculture	32	7,1	50 899	5,0	8 453	41,4	9 160	7,8	15 362	6,4	53 150	7,3
Other self-employed	147	4,1	58 048	3,0	18 145	12,2	8 430	5,3	21 883	4,1	62 741	3,5
Pensioners	897	1,4	2 266	5,8	3 295	9,3	29 079	1,0	7 070	2,4	27 571	1,3
Unemployed	172	5,0	2 746	9,3	503	22,7	17 230	2,3	2 752	4,4	17 727	2,5
Others	158	5,8	5 545	7,0	611	28,5	11 272	5,1	1 451	6,6	15 977	3,8

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 12 months after the end of the statistical reference year. Preliminary data are completed around 15 months after the end of the statistical reference year and final data are released around 16 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](http://ec.europa.eu/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 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 2016 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).

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Source: Income Distribution Statistics 2016, Statistics Finland