

# Labour Force Survey

2018, December, 4th quarter and annual data

## Strong growth in employment continued in December

**Corrected on 24 January 2019.** The corrected number is indicated in red.

According to Statistics Finland’s Labour Force Survey, the number of employed people was 84,000 higher in December 2018 than one year ago. The number of unemployed persons was in December 146,000 and the trend of the unemployment rate was 6.6 per cent. The unemployment rate in the fourth quarter was 6.0 per cent, which was 1.6 percentage points lower than in October to December 2017. In 2018, the rate of employment was 71.7 per cent, having been 69.6 per cent in 2017.

### Unemployment rate and trend of unemployment rate 2008/12–2018/12, persons aged 15–74



Unemployment and employment vary quite considerably by month and the change from the observation of the previous month mainly describes the seasonal aspect rather than the trend in development. Thus, the latest statistical data are compared to the corresponding period of the year before. By contrast, the figures of the trend series that are adjusted for seasonal and random variation are mutually comparable and phenomena associated with long-term development and cyclical changes are thus more easily observable from the trend of the time series.

The trend usually changes somewhat when the data of the following month are included in the time series. This preliminary nature of trend figures should be taken into account when making conclusions. The figures reported in this release are **not adjusted for seasonal variation** unless separately mentioned that they concern the trend. Find out more about the trend [here](#).

In December 2018, the number of **employed persons** was 2,553,000 (margin of error  $\pm 33,000$ ), which was 84,000 more than a year earlier. There were 56,000 more employed men and 28,000 more employed women than in December 2017.

In December, the **employment rate**, that is, the proportion of the employed among persons aged 15 to 64, stood at 72.1 per cent, having been 69.6 per cent one year earlier. From the previous year's December, the employment rate of men aged 15 to 64 rose by 3.4 percentage points to 73.8 per cent and that of women by 1.5 percentage points to 70.3 per cent. Adjusted for seasonal and random variation, the trend of the employment rate was 72.5 per cent.

According to Statistics Finland's Labour Force Survey, there were 146,000 **unemployed** in December 2018 (margin of error  $\pm 17,000$ ), i.e. 82,000 fewer than one year earlier. The number of unemployed men was 72,000 and that of women 74,000.

At 5.4 per cent, the **unemployment rate** was 3.0 percentage points lower in December than one year earlier. The unemployment rate of men decreased by 3.8 percentage points to 5.1 per cent, and that of women by 2.2 percentage points to 5.7 per cent. The trend of the unemployment rate was 6.6 per cent.

In December, there were a total of 617,000 **young people aged 15 to 24**. Of them, 246,000 were employed and 25,000 unemployed. The number of young people in the active population, i.e. the employed and unemployed in total, was 271,000. In December, the unemployment rate for young people aged 15 to 24, that is, the proportion of the unemployed among the labour force, stood at 9.3 per cent, which was 6.2 percentage points lower than one year previously. The trend of the unemployment rate among young people was 15.9 per cent. The share of unemployed young people aged 15 to 24 among the population in the same age group was 4.1 per cent.

There were 1,429,000 in the **inactive population** in December 2018, which was 6,000 more than one year earlier. Of the inactive population, 120,000 persons were in [disguised unemployment](#), which was 25,000 fewer than in December 2017.

## Changes in employment 2017/12 – 2018/12 according to Statistics Finland's Labour Force Survey, population aged 15 to 74

	Year/Month		Change
	2017/12	2018/12	2017/12 - 2018/12
	1000 persons		Per cent, %
Population total	4 119	4 127	0,2
Active population total	2 697	2 698	0,1
Employed	2 469	2 553	3,4
– employees	2 157	2 225	3,2
– self-employed persons and unpaid family workers	312	328	5,0
Unemployed	227	146	–36,0
Inactive population	1 423	1 429	0,4
– Persons in disguised unemployment	145	120	–17,4
	Per cent, %		Percentage points
Employment rate, persons aged 15–64	69,6	72,1	2,5
Unemployment rate	8,4	5,4	–3,0
Activity rate	65,5	65,4	–0,1

Unrounded figures are used in the Change column.  
The data comply with the ILO/EU definition.

## Labour Force Survey data for the fourth quarter of 2018

The average number of employed persons in the fourth quarter of 2018 (October to December) was 2,541,000, or 55,000 more than in the corresponding quarter of 2017. The number of employed persons increased most in information and communication (J) and in construction (F).

**The number of hours worked by employed persons** was 2.4 per cent higher in the fourth quarter of 2018 than twelve months previously.

The average number of **unemployed persons** in the fourth quarter of 2018 was 162,000, which was 43,000 fewer than in the October to December period of 2017. The **unemployment rate** in the fourth quarter of 2018 was 6.0 per cent, which was 1.6 percentage points lower than in the respective period of 2017.

In the fourth quarter of 2018, the number of persons in the **inactive population** was 1,424,000, which was 4,000 fewer than a year earlier. Of the inactive population, 128,000 persons were in [disguised unemployment](#), which was 14,000 fewer than in the corresponding period of 2017.

## Changes in employment 2017/IV – 2018/IV according to Statistics Finland's Labour Force Survey, population aged 15 to 74

	Year/Quarter		Change
	2017/IV	2018/IV	2017/IV - 2018/IV
	1000 persons		Per cent (%)
Active population total	2 690	2 702	0,4
Employed persons total	2 486	2 541	2,2
Unemployed total	205	162	–21,1
– men	113	89	–20,6
– women	92	72	–21,7
Inactive population	1 429	1 424	–0,3
– Persons in disguised unemployment	142	128	–9,9

Unrounded figures are used in the Change column.  
The data comply with the ILO/EU definition.

## Labour Force Survey annual averages for 2018

In 2018, the average number of **employed persons** was 2,540,000, which was 67,000 more than in 2017. In 2018, the **employment rate** was 71.7 per cent, having been 69.6 per cent in 2017.

The **rate of unemployment** was, on average, 7.4 per cent in 2018, having been 8.6 per cent in 2017. In 2018, the average number of **unemployed persons** was 202,000, which was 32,000 lower than in the year before.

**The number of hours worked by employed persons** was 2.3 per cent higher in 2018 than in 2017. The amount of labour input or hours actually worked per employee fell slightly from 2017.

The annual averages from the Labour Force Survey for the year 2018 are published in the appendix tables of this publication and in the [database tables of Statistics Finland's Labour Force Survey](#). A general review on annual data concerning 2018 and on time series data for 2009 to 2018 will be released on 11 April 2019.

## Employment Service Statistics of the Ministry of Economic Affairs and Employment

At the end of December 2018, there were altogether 257,000 persons registered in accordance with the Employment Office Regulations as job seekers at **the employment and economic development offices**. The number of unemployed job seekers was 39,000 lower than in December 2017.

Unemployment fell in December from the corresponding period in 2017 in the areas of all Employment and Economic Development Centres: most in Pirkanmaa (-21%), Kainuu (-19%), North Ostrobothnia (-16%), North Karelia (-15%) and Ostrobothnia (-15%). At the end of January, the number of fully laid off persons registered at the employment and economic development offices was 15,000, which was 2,000 fewer than twelve months earlier.

The number of persons engaged in services included in the activation rate totalled 116,000 at the end of December, which was 2,000 more than in December of the previous year. Altogether, 4.3 per cent of the labour force was covered by labour market policy services.

There were 33,000 unemployed job seekers aged under 25 registered at the employment and economic development offices. Their number was 5,000 lower than in last year's December. During last December, 46,000 new vacancies were reported to the employment and economic development offices, which was 6,000 more than in December 2017.

## Changes 2017/12–2018/12 according to the Employment Service Statistics of the Ministry of Economic Affairs and Employment

	Year/Month		Change
	2017/12	2018/12	2017/12 - 2018/12
	1000 persons		Per cent, %
<b>Unemployed job seekers</b>	296	257	-13,2
– unemployed over a year	92	67	-27,1
<b>Services, total</b>	115	116	1,6
– employed	23	24	2,8
– in labour market training, in training	19	20	7,0
– engaged in work/training trials	9	8	-11,1
– as a job alternation substitute, in rehabilitative work, self-motivated studies supported by unemployment benefit	63	64	1,4
<b>New vacancies at employment and economic development offices</b>	40	46	13,9
Unrounded figures are used in the Change column.			

Contact information for the Ministry of Economic Affairs and Employment:  
Petri Syvänen tel. +358 29 504 8050, [www.tem.fi/en/employment-bulletin](http://www.tem.fi/en/employment-bulletin)

## Links

[Labour Force Survey tables in databases](#)

[About seasonally adjusted trend](#)

The accuracy of figures and the margins of error are explained in [the quality description of the Labour Force Survey](#).

[Comparison between the employment statistics of Statistics Finland and the Ministry of Economic Affairs and Employment](#)

[Job vacancy survey](#)

[Latest seasonally adjusted employment figures published by the EU](#) can be found on Eurostat's home page, and

[Latest data on open job vacancies published by the EU](#) can be found on

Eurostat's home page <http://ec.europa.eu/eurostat>

# Contents

## Tables

### Appendix tables 2018, December

Appendix table 1. Key indicators in the Labour Force Survey by sex 2017/12 - 2018/12 .....	8
Appendix table 2. Population aged 15-74 by labour force status and sex 2017/12 - 2018/12.....	8
Appendix table 3. Population by sex and age 2017/12 - 2018/12.....	9
Appendix table 4. Active population by sex and age 2017/12 - 2018/12.....	10
Appendix table 5. Activity rates by sex and age 2017/12 - 2018/12.....	11
Appendix table 6. Employed persons by sex and age 2017/12 - 2018/12.....	12
Appendix table 7. Employment rates by sex and age 2017/12 - 2018/12.....	13
Appendix table 8. Employed persons aged 15-74 by status in employment 2017/12 - 2018/12.....	13
Appendix table 9. Employed persons aged 15-74 by employer sector 2017/12 - 2018/12.....	14
Appendix table 10. Employed persons aged 15-74 by Regional State Administrative Agencies (AVI) 2017/12 - 2018/12.....	14
Appendix table 11. Part-time employed persons aged 15-74 by sex 2017/12 - 2018/12.....	14
Appendix table 12. Proportion of part-time employed persons in all employed persons aged 15-74 by sex 2017/12 - 2018/12, %.....	14
Appendix table 13. Employees aged 15-74 by type of employment relationship 2017/12 - 2018/12.....	15
Appendix table 14. Employees aged 15-74 by type of employment relationship 2017/12 - 2018/12, %.....	15
Appendix table 15. Unemployed persons by sex and age 2017/12 - 2018/12.....	16
Appendix table 16. Unemployment rates by sex and age 2017/12 - 2018/12.....	17
Appendix table 17. Unemployment rates by Regional State Administrative Agencies (AVI) 2017/12 - 2018/12, persons aged 15-74.....	17
Appendix table 18. Seasonally adjusted trends 2018/12.....	18

### Appendix tables 2018, 4th quarter

Appendix table 19. Key indicators in the Labour Force Survey by sex 2017/IV - 2018/IV.....	19
Appendix table 20. Population aged 15-74 by labour force status and sex 2017/IV - 2018/IV.....	19
Appendix table 21. Population by sex and age 2017/IV - 2018/IV.....	20
Appendix table 22. Active population by sex and age 2017/IV - 2018/IV.....	21
Appendix table 23. Activity rates by sex and age 2017/IV - 2018/IV.....	22
Appendix table 24. Employed persons by sex and age 2017/IV - 2018/IV.....	23
Appendix table 25. Employment rates by sex and age 2017/IV - 2018/IV.....	24
Appendix table 26. Employed persons aged 15-74 by status in employment 2017/IV - 2018/IV.....	24
Appendix table 27. Employed persons aged 15-74 by employer sector 2017/IV - 2018/IV.....	25
Appendix table 28. Employed persons aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV.....	26
Appendix table 29. Hours actually worked of employed persons aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV.....	28
Appendix table 30. Employed persons aged 15-74 by Regional State Administrative Agencies (AVI) 2017/IV - 2018/IV.....	29
Appendix table 31. Employed persons aged 15-74 by region (2011) 2017/IV - 2018/IV.....	29
Appendix table 32. Part-time employed persons aged 15-74 by sex 2017/IV - 2018/IV.....	30

Appendix table 33. Proportion of part-time employed persons in all employed persons aged 15-74 by sex 2017/IV - 2018/IV, %.....	30
Appendix table 34. Employees aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV.....	31
Appendix table 35. Hours actually worked of employees aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV.....	33
Appendix table 36. Employees aged 15-74 by type of employment relationship 2017/IV - 2018/IV.....	34
Appendix table 37. Employees aged 15-74 by type of employment relationship 2017/IV - 2018/IV, %.....	34
Appendix table 38. Different types of employment relationships less than 12 month's duration 2017/IV - 2018/IV, persons aged 15-74.....	35
Appendix table 39. Different types of employment relationships less than 12 month's duration 2017/IV - 2018/IV, persons aged 15-74, %.....	35
Appendix table 40. Unemployed persons by sex and age 2017/IV - 2018/IV.....	36
Appendix table 41. Unemployment rate by sex and age 2017/IV - 2018/IV.....	37
Appendix table 42. Unemployment rates by Regional State Administrative Agencies (AVI) 2017/IV - 2018/IV.....	37
Appendix table 43. Unemployment rates by region (2011) 2017/IV - 2018/IV.....	38
<b>Appendix tables 2018, year</b>	
Appendix table 44. Key indicators in the Labour Force Survey by sex in 2016 - 2018.....	39
Appendix table 45. Population aged 15-74 by labour force status and sex in 2016 - 2018.....	39
Appendix table 46. Employment rates by sex and age in 2016 - 2018.....	40
Appendix table 47. Employed person aged 15-74 by educational level and sex in 2015 - 2017.....	41
Appendix table 48. Employed persons aged 15-74 by industry (TOL 2008) in 2016 - 2018.....	42
Appendix table 49. Hours actually worked by employed persons aged 15-74 by industry (TOL 2008) in 2016 - 2018.....	44
Appendix table 50. Employed persons aged 15-74 by employer sector and sex in 2016 - 2018.....	45
Appendix table 51. Employed persons aged 15-74 by region (2011) in 2016 - 2018.....	46
Appendix table 52. Employees aged 15-74 by type of employment relationship and sex in 2016 - 2018.....	47
Appendix table 53. Unemployment rates by sex and age in 2016 - 2018.....	48
Appendix table 54. Unemployment rates by region (2011) in 2016 - 2018, persons aged 15-74.....	49
Appendix table 55. Unemployment rates by educational level and sex in 2015 - 2017, persons aged 15-74.....	50

## Figures

### Appendix figures 2018, December

Appendix figure 1. Employment rate and trend of employment rate 2008/12–2018/12, persons aged 15–64.....	51
Appendix figure 2. Unemployment rate and trend of unemployment rate 2008/12–2018/12, persons aged 15–74.....	51
Appendix figure 3. Employment rate and trend of employment rate 1989/01–2018/12, persons aged 15–64.....	51
Appendix figure 4. Unemployment rate and trend of unemployment rate 1989/01–2018/12, persons aged 15–74.....	51

5

2

Quality Description: Labour force survey.....	53
---	----

# Appendix tables 2018, December

**Appendix table 1. Key indicators in the Labour Force Survey by sex 2017/12 - 2018/12**

		Year/Month		Change
		2017/12	2018/12	2017/12 - 2018/12
		Per cent, %	Per cent, %	Percentage points
Indicator	Sex			
Employment rate, persons aged 15-64	Both sexes	69,6	72,1	2,5
	Males	70,4	73,8	3,4
	Females	68,8	70,3	1,5
Unemployment rate, persons aged 15-74	Both sexes	8,4	5,4	-3,0
	Males	8,9	5,1	-3,8
	Females	7,9	5,7	-2,2
Activity rate, persons aged 15-74	Both sexes	65,5	65,4	-0,1
	Males	67,9	67,8	0,0
	Females	63,0	62,9	-0,2

**Appendix table 2. Population aged 15-74 by labour force status and sex 2017/12 - 2018/12**

		Year/Month		Change	Change
		2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Labour force status				
Both sexes	Population total	4 119	4 127	8	0,2
	Active population total	2 697	2 698	2	0,1
	- employed	2 469	2 553	84	3,4
	- unemployed	227	146	-82	-36,0
	Inactive population	1 423	1 429	6	0,4
Males	Population total	2 069	2 074	5	0,2
	Active population total	1 404	1 407	3	0,2
	- employed	1 279	1 335	56	4,4
	- unemployed	125	72	-53	-42,4
	Inactive population	665	667	2	0,3
Females	Population total	2 050	2 053	3	0,1
	Active population total	1 293	1 291	-1	-0,1
	- employed	1 190	1 217	28	2,3
	- unemployed	103	74	-29	-28,2
	Inactive population	758	762	4	0,5



**Appendix table 3. Population by sex and age 2017/12 - 2018/12**

		Year/Month		Change	
		2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	4 119	4 127	8	0,2
	15-64	3 443	3 435	-8	-0,2
	15-24	624	617	-7	-1,1
	25-34	705	707	2	0,2
	35-44	682	698	16	2,3
	45-54	699	682	-17	-2,4
	55-64	733	731	-2	-0,3
	65-74	676	692	16	2,4
Males	15-74	2 069	2 074	5	0,2
	15-64	1 748	1 745	-3	-0,2
	15-24	319	317	-1	-0,4
	25-34	364	363	-1	-0,3
	35-44	351	357	6	1,7
	45-54	354	345	-9	-2,6
	55-64	360	363	3	0,8
	65-74	321	329	8	2,5
Females	15-74	2 050	2 053	3	0,1
	15-64	1 695	1 690	-5	-0,3
	15-24	305	300	-5	-1,7
	25-34	341	344	3	0,9
	35-44	331	341	10	3,0
	45-54	345	337	-8	-2,3
	55-64	373	368	-5	-1,3
	65-74	355	363	8	2,2

**Appendix table 4. Active population by sex and age 2017/12 - 2018/12**

		Year/Month		Change	
		2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	2 697	2 698	2	0,1
	15-64	2 621	2 620	-1	0,0
	15-24	295	271	-23	-7,9
	25-34	573	588	15	2,5
	35-44	610	630	20	3,3
	45-54	631	612	-20	-3,1
	55-64	511	518	7	1,4
	65-74	76	79	3	3,9
Males	15-74	1 404	1 407	3	0,2
	15-64	1 353	1 359	6	0,4
	15-24	139	132	-7	-5,2
	25-34	313	325	12	3,8
	35-44	324	337	13	4,0
	45-54	325	308	-17	-5,2
	55-64	252	257	5	1,9
	65-74	51	48	-2	-4,8
Females	15-74	1 293	1 291	-1	-0,1
	15-64	1 267	1 260	-7	-0,5
	15-24	156	140	-16	-10,4
	25-34	260	263	3	1,0
	35-44	286	293	7	2,4
	45-54	306	303	-3	-0,9
	55-64	259	261	2	1,0
	65-74	25	31	5	21,6

**Appendix table 5. Activity rates by sex and age 2017/12 - 2018/12**

		Year/Month		Change
		2017/12	2018/12	2017/12 - 2018/12
		Per cent, %	Per cent, %	Percentage points
Sex	Age group			
Both sexes	15-74	65,5	65,4	-0,1
	15-64	76,1	76,3	0,2
	15-24	47,3	44,0	-3,3
	25-34	81,3	83,2	1,9
	35-44	89,4	90,2	0,8
	45-54	90,3	89,7	-0,6
	55-64	69,7	70,9	1,2
	65-74	11,2	11,4	0,2
Males	15-74	67,9	67,8	0,0
	15-64	77,4	77,9	0,5
	15-24	43,6	41,5	-2,1
	25-34	86,0	89,5	3,6
	35-44	92,2	94,3	2,1
	45-54	91,9	89,5	-2,5
	55-64	70,0	70,9	0,8
	65-74	15,8	14,6	-1,1
Females	15-74	63,0	62,9	-0,2
	15-64	74,8	74,6	-0,2
	15-24	51,1	46,6	-4,5
	25-34	76,4	76,5	0,1
	35-44	86,5	86,0	-0,5
	45-54	88,6	89,9	1,3
	55-64	69,3	70,9	1,6
	65-74	7,1	8,4	1,3

**Appendix table 6. Employed persons by sex and age 2017/12 - 2018/12**

		Year/Month		Change	
		2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	2 469	2 553	84	3,4
	15-64	2 396	2 475	78	3,3
	15-24	249	246	-3	-1,2
	25-34	527	556	29	5,5
	35-44	574	605	31	5,4
	45-54	583	581	-2	-0,3
	55-64	464	487	24	5,1
	65-74	73	78	5	7,3
Males	15-74	1 279	1 335	56	4,4
	15-64	1 231	1 288	57	4,6
	15-24	113	120	7	5,9
	25-34	290	311	21	7,2
	35-44	301	323	22	7,2
	45-54	297	294	-3	-0,9
	55-64	230	240	10	4,4
	65-74	48	48	0	-1,0
Females	15-74	1 190	1 217	28	2,3
	15-64	1 165	1 187	22	1,9
	15-24	136	126	-10	-7,2
	25-34	237	245	8	3,4
	35-44	273	282	9	3,4
	45-54	286	287	1	0,3
	55-64	234	247	13	5,7
	65-74	25	30	6	23,4

**Appendix table 7. Employment rates by sex and age 2017/12 - 2018/12**

		Year/Month		Change
		2017/12	2018/12	2017/12 - 2018/12
		Per cent, %	Per cent, %	Percentage points
Sex	Age group			
Both sexes	15-74	59,9	61,9	1,9
	15-64	69,6	72,1	2,5
	15-24	40,0	39,9	-0,1
	25-34	74,7	78,6	3,9
	35-44	84,1	86,6	2,5
	45-54	83,3	85,1	1,8
	55-64	63,3	66,7	3,4
	65-74	10,7	11,3	0,5
Males	15-74	61,8	64,4	2,6
	15-64	70,4	73,8	3,4
	15-24	35,6	37,9	2,3
	25-34	79,7	85,7	6,0
	35-44	85,7	90,3	4,6
	45-54	83,8	85,2	1,4
	55-64	63,8	66,2	2,3
	65-74	15,0	14,5	-0,5
Females	15-74	58,0	59,3	1,3
	15-64	68,8	70,3	1,5
	15-24	44,5	42,0	-2,5
	25-34	69,4	71,2	1,8
	35-44	82,5	82,8	0,3
	45-54	82,8	85,0	2,2
	55-64	62,8	67,2	4,5
	65-74	6,9	8,3	1,4

**Appendix table 8. Employed persons aged 15-74 by status in employment 2017/12 - 2018/12**

	Year/Month		Change	
	2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
	1000 persons	1000 persons	1000 persons	Per cent, %
Status in employment				
Employed persons total	2 469	2 553	84	3,4
Employees total	2 157	2 225	68	3,2
Self-employed persons and unpaid family workers	312	328	16	5,0

**Appendix table 9. Employed persons aged 15-74 by employer sector 2017/12 - 2018/12**

	Year/Month		Change	
	2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
	1000 persons	1000 persons	1000 persons	Per cent, %
Employer sector				
Employer sector total (incl. employer sector unknown)	2 469	2 553	84	3,4
Private sector	1 796	1 858	62	3,4
Public sector	669	692	23	3,4
- central government	138	138	0	0,1
- local government	530	553	23	4,3

**Appendix table 10. Employed persons aged 15-74 by Regional State Administrative Agencies (AVI) 2017/12 - 2018/12**

	Year/Month		Change	
	2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
	1000 persons	1000 persons	1000 persons	Per cent, %
Regional State Administrative Agencies				
Whole country (incl. Åland)	2 469	2 553	84	3,4
Southern Finland AVI	1 112	1 139	28	2,5
Southwestern Finland AVI	301	322	21	7,0
Eastern Finland AVI	227	230	3	1,4
Western and Inland Finland AVI	534	556	23	4,2
Northern Finland AVI	213	215	2	1,0
Lapland AVI	68	75	7	10,3

**Appendix table 11. Part-time employed persons aged 15-74 by sex 2017/12 - 2018/12**

	Year/Month		Change	
	2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
	1000 persons	1000 persons	1000 persons	Per cent, %
Sex				
Both sexes	438	450	12	2,8
Males	175	170	-5	-2,8
Females	263	280	17	6,5

**Appendix table 12. Proportion of part-time employed persons in all employed persons aged 15-74 by sex 2017/12 - 2018/12, %**

	Year/Month		Change
	2017/12	2018/12	2017/12 - 2018/12
	Per cent, %	Per cent, %	Percentage points
Sex			
Both sexes	17,7	17,6	-0,1
Males	13,7	12,7	-0,9
Females	22,1	23,0	0,9

**Appendix table 13. Employees aged 15-74 by type of employment relationship 2017/12 - 2018/12**

Employment relationship	Year/Month		Change	
	2017/12	2018/12	2017/12 - 2018/12	
	1000 persons	1000 persons	1000 persons	Per cent, %
Employees total	2 157	2 225	68	3,2
- permanent full-time work	1 589	1 638	50	3,1
- permanent part-time work	243	243	1	0,3
- temporary (fixed-term) full-time work	210	213	3	1,3
- temporary (fixed-term) part-time work	115	130	15	13,0
Temporary (fixed-term) work total	326	343	18	5,4
Part-time work total	358	374	16	4,4

**Appendix table 14. Employees aged 15-74 by type of employment relationship 2017/12 - 2018/12, %**

Employment relationship	Year/Month		Change
	2017/12	2018/12	2017/12 - 2018/12
	Per cent, %	Per cent, %	Percentage points
Employees total	100,0	100,0	0,0
- permanent full-time work	73,7	73,6	0,0
- permanent part-time work	11,2	10,9	-0,3
- temporary (fixed-term) full-time work	9,8	9,6	-0,2
- temporary (fixed-term) part-time work	5,3	5,9	0,5
Temporary (fixed-term) work total	15,1	15,4	0,3
Part-time work total	16,6	16,8	0,2

**Appendix table 15. Unemployed persons by sex and age 2017/12 - 2018/12**

		Year/Month		Change	
		2017/12	2018/12	2017/12 - 2018/12	2017/12 - 2018/12
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	227	146	-82	-36,0
	15-64	224	145	-80	-35,5
	15-24	46	25	-20	-44,7
	25-34	47	32	-14	-30,9
	35-44	36	25	-11	-30,2
	45-54	49	31	-18	-35,9
	55-64	47	31	-16	-34,6
Males	15-74	125	72	-53	-42,4
	15-64	122	71	-51	-41,6
	15-24	26	12	-14	-54,8
	25-34	23	14	-9	-39,3
	35-44	23	14	-9	-37,4
	45-54	29	15	-14	-49,1
	55-64	22	17	-5	-23,7
Females	15-74	103	74	-29	-28,2
	15-64	102	73	-29	-28,1
	15-24	20	14	-6	-32,1
	25-34	24	18	-5	-22,8
	35-44	13	11	-2	-17,9
	45-54	20	17	-3	-17,1
	55-64	24	14	-11	-44,5



**Appendix table 16. Unemployment rates by sex and age 2017/12 - 2018/12**

		Year/Month		Change
		2017/12	2018/12	2017/12 - 2018/12
		Per cent, %	Per cent, %	Percentage points
Sex	Age group			
Both sexes	15-74	8,4	5,4	-3,0
	15-64	8,6	5,5	-3,0
	15-24	15,5	9,3	-6,2
	25-34	8,2	5,5	-2,7
	35-44	5,9	4,0	-1,9
	45-54	7,7	5,1	-2,6
	55-64	9,2	5,9	-3,3
Males	15-74	8,9	5,1	-3,8
	15-64	9,0	5,3	-3,8
	15-24	18,4	8,8	-9,6
	25-34	7,3	4,3	-3,0
	35-44	7,0	4,2	-2,8
	45-54	8,8	4,7	-4,1
	55-64	8,9	6,7	-2,2
Females	15-74	7,9	5,7	-2,2
	15-64	8,0	5,8	-2,2
	15-24	13,0	9,8	-3,1
	25-34	9,1	7,0	-2,2
	35-44	4,6	3,7	-0,9
	45-54	6,6	5,5	-1,1
	55-64	9,5	5,2	-4,3

**Appendix table 17. Unemployment rates by Regional State Administrative Agencies (AVI) 2017/12 - 2018/12, persons aged 15-74**

	Year/Month		Change
	2017/12	2018/12	2017/12 - 2018/12
	Per cent, %	Per cent, %	Percentage points
Regional State Administrative Agencies			
Whole country (incl. Åland)	8,4	5,4	-3,0
Southern Finland AVI	7,6	5,7	-1,9
Southwestern Finland AVI	8,3	5,0	-3,3
Eastern Finland AVI	9,8	4,8	-5,0
Western and Inland Finland AVI	9,6	5,6	-4,0
Northern Finland AVI	8,2	5,0	-3,2
Lapland AVI	.	.	.

**Appendix table 18. Seasonally adjusted trends 2018/12**

	Employed	Employment rate, persons aged 15-64	Unemployed	Unemployed job seekers (MEE)	Unemployment rate, persons aged 15-74	Unemployment rate, persons aged 15-24
	1000 persons	Per cent, %	1000 persons	1000 persons	Per cent, %	Per cent, %
2016/12	2 449	68,9	235	336	8,7	20,1
2017/01	2 451	68,9	235	330	8,7	20,2
2017/02	2 455	69,1	236	325	8,7	20,2
2017/03	2 460	69,2	237	320	8,8	20,2
2017/04	2 462	69,3	237	315	8,8	20,2
2017/05	2 463	69,3	235	311	8,7	20,2
2017/06	2 464	69,3	233	306	8,7	20,0
2017/07	2 468	69,5	232	301	8,6	19,7
2017/08	2 475	69,7	231	296	8,6	19,4
2017/09	2 484	70,0	230	291	8,5	19,0
2017/10	2 495	70,3	228	287	8,4	18,7
2017/11	2 504	70,6	227	282	8,3	18,4
2017/12	2 510	70,8	229	277	8,3	18,3
2018/01	2 514	70,9	227	273	8,2	18,1
2018/02	2 517	71,0	222	270	8,0	17,9
2018/03	2 520	71,1	217	267	7,9	17,7
2018/04	2 527	71,3	210	265	7,7	17,4
2018/05	2 535	71,5	204	261	7,5	17,0
2018/06	2 542	71,7	199	258	7,4	16,8
2018/07	2 544	71,8	198	255	7,3	16,9
2018/08	2 544	71,8	197	251	7,2	16,9
2018/09	2 547	71,9	193	248	7,1	16,8
2018/10	2 552	72,1	188	244	6,9	16,5
2018/11	2 560	72,3	183	241	6,7	16,2
2018/12	2 568	72,5	178	237	6,6	15,9

## Appendix tables 2018, 4th quarter

**Appendix table 19. Key indicators in the Labour Force Survey by sex 2017/IV - 2018/IV**

		Year/Quarter		Change
		2017/IV	2018/IV	2017/IV - 2018/IV
		Per cent, %	Per cent, %	Percentage points
Indicator	Sex			
Employment rate, persons aged 15-64	Both sexes	70,0	71,7	1,7
	Males	71,0	72,8	1,8
	Females	69,0	70,6	1,6
Unemployment rate, persons aged 15-74	Both sexes	7,6	6,0	-1,6
	Males	8,0	6,4	-1,7
	Females	7,1	5,6	-1,6
Activity rate, persons aged 15-74	Both sexes	65,3	65,5	0,2
	Males	67,7	67,8	0,1
	Females	62,9	63,1	0,2

**Appendix table 20. Population aged 15-74 by labour force status and sex 2017/IV - 2018/IV**

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Labour force status				
Both sexes	Population total	4 119	4 127	8	0,2
	Active population total	2 690	2 702	12	0,4
	- employed	2 486	2 541	55	2,2
	- unemployed	205	162	-43	-21,1
	Inactive population	1 429	1 424	-4	-0,3
Males	Population total	2 069	2 074	5	0,2
	Active population total	1 400	1 406	6	0,4
	- employed	1 288	1 317	29	2,3
	- unemployed	113	89	-23	-20,6
	Inactive population	669	668	-1	-0,1
Females	Population total	2 050	2 053	3	0,1
	Active population total	1 290	1 296	6	0,4
	- employed	1 198	1 224	26	2,1
	- unemployed	92	72	-20	-21,7
	Inactive population	760	757	-3	-0,4

**Appendix table 21. Population by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change	
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	4 119	4 127	8	0,2
	15-64	3 444	3 435	-9	-0,3
	15-24	624	617	-7	-1,1
	25-34	705	707	2	0,2
	35-44	681	697	16	2,3
	45-54	701	683	-17	-2,4
	55-64	733	731	-2	-0,3
	65-74	675	691	17	2,5
Males	15-74	2 069	2 074	5	0,2
	15-64	1 748	1 745	-3	-0,2
	15-24	320	317	-3	-0,9
	25-34	364	363	-0	0,0
	35-44	350	357	8	2,2
	45-54	354	346	-8	-2,3
	55-64	361	361	0	0,1
	65-74	320	329	8	2,6
Females	15-74	2 050	2 053	3	0,1
	15-64	1 696	1 690	-6	-0,3
	15-24	305	300	-4	-1,4
	25-34	342	343	2	0,5
	35-44	331	340	8	2,5
	45-54	346	338	-9	-2,6
	55-64	372	369	-3	-0,7
	65-74	354	362	8	2,3

**Appendix table 22. Active population by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change	
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	2 690	2 702	12	0,4
	15-64	2 615	2 623	9	0,3
	15-24	285	272	-13	-4,5
	25-34	579	587	8	1,4
	35-44	610	629	19	3,1
	45-54	635	622	-13	-2,0
	55-64	507	513	7	1,4
	65-74	76	79	3	4,1
Males	15-74	1 400	1 406	6	0,4
	15-64	1 352	1 358	6	0,4
	15-24	138	133	-5	-3,6
	25-34	319	323	4	1,4
	35-44	322	334	12	3,8
	45-54	322	314	-8	-2,4
	55-64	251	253	2	0,8
	65-74	48	48	0	0,5
Females	15-74	1 290	1 296	6	0,4
	15-64	1 262	1 265	3	0,2
	15-24	146	139	-8	-5,4
	25-34	260	263	4	1,4
	35-44	288	295	7	2,5
	45-54	313	308	-5	-1,6
	55-64	256	260	5	1,9
	65-74	28	31	3	10,3

**Appendix table 23. Activity rates by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change
		2017/IV	2018/IV	2017/IV - 2018/IV
		Per cent, %	Per cent, %	Percentage points
Sex	Age group			
Both sexes	15-74	65,3	65,5	0,2
	15-64	75,9	76,4	0,4
	15-24	45,6	44,1	-1,6
	25-34	82,1	83,0	0,9
	35-44	89,5	90,2	0,7
	45-54	90,6	91,0	0,4
	55-64	69,1	70,3	1,2
	65-74	11,2	11,4	0,2
Males	15-74	67,7	67,8	0,1
	15-64	77,4	77,8	0,5
	15-24	43,3	42,1	-1,2
	25-34	87,8	89,0	1,2
	35-44	92,0	93,4	1,4
	45-54	91,0	90,9	0,0
	55-64	69,5	70,0	0,5
	65-74	14,9	14,6	-0,3
Females	15-74	62,9	63,1	0,2
	15-64	74,4	74,8	0,4
	15-24	48,1	46,1	-2,0
	25-34	76,1	76,7	0,7
	35-44	86,8	86,8	0,0
	45-54	90,2	91,1	0,9
	55-64	68,7	70,5	1,8
	65-74	7,9	8,6	0,6

**Appendix table 24. Employed persons by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change	
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	2 486	2 541	55	2,2
	15-64	2 412	2 463	52	2,1
	15-24	244	239	-5	-2,2
	25-34	529	550	21	4,0
	35-44	574	599	25	4,4
	45-54	598	594	-4	-0,7
	55-64	467	482	15	3,2
	65-74	74	77	3	4,6
Males	15-74	1 288	1 317	29	2,3
	15-64	1 241	1 270	29	2,3
	15-24	117	115	-2	-1,6
	25-34	291	303	12	4,2
	35-44	304	318	14	4,7
	45-54	301	300	-1	-0,3
	55-64	229	234	5	2,2
	65-74	46	47	1	1,5
Females	15-74	1 198	1 224	26	2,1
	15-64	1 170	1 193	23	2,0
	15-24	127	124	-3	-2,7
	25-34	238	247	9	3,7
	35-44	271	282	11	4,1
	45-54	297	294	-4	-1,2
	55-64	237	247	10	4,2
	65-74	28	30	3	9,9

**Appendix table 25. Employment rates by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change
		2017/IV	2018/IV	2017/IV - 2018/IV
		Per cent, %	Per cent, %	Percentage points
Sex	Age group			
Both sexes	15-74	60,3	61,6	1,2
	15-64	70,0	71,7	1,7
	15-24	39,1	38,7	-0,4
	25-34	75,0	77,8	2,8
	35-44	84,3	86,0	1,7
	45-54	85,4	86,8	1,5
	55-64	63,7	65,9	2,3
	65-74	11,0	11,2	0,2
Males	15-74	62,2	63,5	1,3
	15-64	71,0	72,8	1,8
	15-24	36,5	36,2	-0,3
	25-34	80,1	83,4	3,3
	35-44	86,8	88,9	2,1
	45-54	84,9	86,7	1,8
	55-64	63,4	64,8	1,3
	65-74	14,5	14,3	-0,2
Females	15-74	58,4	59,6	1,2
	15-64	69,0	70,6	1,6
	15-24	41,9	41,3	-0,6
	25-34	69,6	71,9	2,3
	35-44	81,6	82,9	1,3
	45-54	85,8	87,0	1,2
	55-64	63,9	67,0	3,1
	65-74	7,8	8,4	0,6

**Appendix table 26. Employed persons aged 15-74 by status in employment 2017/IV - 2018/IV**

	Year/Quarter		Change	Change
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Status in employment				
Employed persons total	2 486	2 541	55	2,2
Employees total	2 172	2 205	33	1,5
Self-employed persons and unpaid family workers	314	336	22	7,0



**Appendix table 27. Employed persons aged 15-74 by employer sector 2017/IV - 2018/IV**

	Year/Quarter		Change	
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Employer sector				
Employer sector total (incl. employer sector unknown)	2 486	2 541	55	2,2
Private sector	1 799	1 858	59	3,3
Public sector	680	678	-2	-0,3
- central government	144	137	-7	-5,0
- local government	536	541	5	1,0

**Appendix table 28. Employed persons aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV**

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Industry	TOL 2008				
Industries total	00-99	2 486	2 541	55	2,2
A, B Agriculture, forestry and fishing; mining and quarrying	01-09	96	98	2	2,3
Agriculture	01	68	68	-0	-0,3
C Manufacturing	10-33	328	336	8	2,4
Manufacture of food products, beverages and textiles	10-15	45	47	2	5,1
Manufacture of wood products, paper and paper products; printing and reproduction of recorded media	16-18	45	50	5	11,4
Manufacture of chemicals and chemical products and basic pharmaceutical products	19-23	47	46	-1	-2,4
Manufacture of basic metals and of fabricated metal products, except machinery and equipment	24-25	53	56	4	6,7
Manufacture of electronic and optical products, electrical equipment, machinery and vehicles	26-30	104	103	-1	-1,3
Manufacture of furniture, other manufacturing; repair and installation of machinery and equipment	31-33	35	34	-1	-1,8
D, E Electricity, gas, steam and air conditioning and water supply; sewerage and waste management	35-39	28	24	-4	-12,8
F Construction	41-43	190	199	9	4,9
Construction of buildings	41	70	73	3	4,0
Specialised construction activities	43	99	106	6	6,4
G Wholesale and retail trade; repair of motor vehicles and motorcycles	45-47	279	285	6	2,3
Wholesale and retail trade and repair of motor vehicles and motorcycles	45	44	47	4	9,0
Wholesale trade, except of motor vehicles and motorcycles	46	80	90	10	12,9
Retail trade, except of motor vehicles and motorcycles	47	155	148	-8	-5,0
H Transportation and storage	49-53	143	143	0	0,1
Land, water and air transport	49-51	91	91	-0	-0,1
Warehousing and support activities for transportation; postal and courier activities	52-53	51	52	0	0,5
I Accommodation and food service activities	55-56	81	87	6	7,0
J Information and communication	58-63	106	118	12	11,1
K, L Financial, insurance and real estate activities	64-68	75	75	1	0,7
M Professional, scientific and technical activities	69-75	177	185	8	4,8
Architectural and engineering activities; technical testing and analysis	71	67	75	8	12,0
N Administrative and support service activities	77-82	108	109	2	1,7
Services to buildings and landscape activities	81	61	63	2	3,9
O Public administration and defence; compulsory social security	84	116	114	-2	-1,9
P Education	85	190	189	-1	-0,5
Q Human health and social work activities	86-88	408	416	8	2,0
Human health activities	86	188	186	-2	-1,0

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Residential care activities	87	85	94	9	11,0
Social work activities without accommodation	88	135	136	1	0,6
R Arts, entertainment and recreation	90-93	67	68	1	1,5
S-U Other service activities	94-99	90	87	-3	-3,4
X Industry unknown	00	6	7	.	.

**Appendix table 29. Hours actually worked of employed persons aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV**

	TOL 2008	Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		Million hours	Million hours	Million hours	Per cent, %
Industry	TOL 2008				
Industries total	00-99	1038,0	1062,8	24,8	2,4
A, B Agriculture, forestry and fishing; mining and quarrying	01-09	45,8	45,3	-0,4	-0,9
Agriculture	01	33,2	32,7	-0,5	-1,4
C Manufacturing	10-33	146,5	148,3	1,7	1,2
Manufacture of food products, beverages and textiles	10-15	18,6	20,2	1,6	8,5
Manufacture of wood products, paper and paper products; printing and reproduction of recorded media	16-18	19,5	21,8	2,3	11,6
Manufacture of chemicals and chemical products and basic pharmaceutical products	19-23	20,7	19,3	-1,3	-6,5
Manufacture of basic metals and of fabricated metal products, except machinery and equipment	24-25	23,4	25,2	1,8	7,7
Manufacture of electronic and optical products, electrical equipment, machinery and vehicles	26-30	48,6	47,5	-1,1	-2,3
Manufacture of furniture, other manufacturing; repair and installation of machinery and equipment	31-33	15,7	14,3	-1,5	-9,3
D, E Electricity, gas, steam and air conditioning and water supply; sewerage and waste management	35-39	12,7	10,8	-1,9	-14,6
F Construction	41-43	86,6	92,3	5,7	6,6
Construction of buildings	41	31,6	33,3	1,7	5,4
Specialised construction activities	43	45,9	50,2	4,3	9,3
G Wholesale and retail trade; repair of motor vehicles and motorcycles	45-47	115,3	119,9	4,6	4,0
Wholesale and retail trade and repair of motor vehicles and motorcycles	45	20,4	22,1	1,8	8,7
Wholesale trade, except of motor vehicles and motorcycles	46	36,4	42,1	5,7	15,7
Retail trade, except of motor vehicles and motorcycles	47	58,6	55,7	-2,9	-4,9
H Transportation and storage	49-53	62,7	63,6	0,9	1,4
Land, water and air transport	49-51	43,0	43,0	0,0	0,0
Warehousing and support activities for transportation; postal and courier activities	52-53	19,8	20,6	0,9	4,5
I Accommodation and food service activities	55-56	30,0	34,9	4,9	16,3
J Information and communication	58-63	46,0	52,4	6,4	13,9
K, L Financial, insurance and real estate activities	64-68	31,6	32,7	1,2	3,7
M Professional, scientific and technical activities	69-75	75,6	76,2	0,6	0,8
Architectural and engineering activities; technical testing and analysis	71	28,8	31,7	3,0	10,4
N Administrative and support service activities	77-82	43,5	45,4	1,9	4,4
Services to buildings and landscape activities	81	24,1	24,9	0,8	3,2
O Public administration and defence; compulsory social security	84	49,0	47,1	-1,9	-3,9
P Education	85	71,6	69,6	-2,0	-2,8
Q Human health and social work activities	86-88	161,4	165,2	3,8	2,3

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		Million hours	Million hours	Million hours	Per cent, %
Human health activities	86	75,7	73,7	-2,1	-2,7
Residential care activities	87	34,7	39,6	4,9	14,0
Social work activities without accommodation	88	51,0	51,9	1,0	1,9
R Arts, entertainment and recreation	90-93	23,6	23,3	-0,3	-1,2
S-U Other service activities	94-99	33,6	32,4	-1,3	-3,7
X Industry unknown	00	2,4	3,4	.	.

**Appendix table 30. Employed persons aged 15-74 by Regional State Administrative Agencies (AVI) 2017/IV - 2018/IV**

	Year/Quarter		Change	Change
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Regional State Administrative Agencies				
Whole country (incl. Åland)	2 486	2 541	55	2,2
Southern Finland AVI	1 117	1 133	16	1,4
Southwestern Finland AVI	306	323	17	5,4
Eastern Finland AVI	228	234	6	2,7
Western and Inland Finland AVI	538	548	10	1,9
Northern Finland AVI	209	212	3	1,5
Lapland AVI	72	76	4	4,9

**Appendix table 31. Employed persons aged 15-74 by region (2011) 2017/IV - 2018/IV**

Region	Year/Quarter		Change	Change
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Whole country (incl. Åland)	2 486	2 541	55	2,2
Uusimaa	834	840	6	0,7
Varsinais-Suomi	215	225	10	4,7
Satakunta	91	98	6	7,1
Kanta-Häme	78	79	2	2,0
Pirkanmaa	226	232	6	2,8
Päijät-Häme	82	90	9	10,8
Kymenlaakso	71	70	-1	-1,9
South Karelia	52	54	1	2,5
Etelä-Savo	58	59	1	0,9
Pohjois-Savo	107	106	-1	-0,6
North Karelia	63	69	6	9,8
Central Finland	116	117	1	1,0
South Ostrobothnia	84	86	2	2,3
Ostrobothnia	81	83	2	2,9
Central Ostrobothnia	32	30	-2	-5,5
North Ostrobothnia	180	185	5	2,7
Kainuu	29	28	-2	-5,9
Lapland	72	76	4	4,9

**Appendix table 32. Part-time employed persons aged 15-74 by sex 2017/IV - 2018/IV**

	Year/Quarter		Change	
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Sex				
Both sexes	427	448	21	4,8
Males	163	163	-0	-0,1
Females	264	285	21	7,9

**Appendix table 33. Proportion of part-time employed persons in all employed persons aged 15-74 by sex 2017/IV - 2018/IV, %**

	Year/Quarter		Change
	2017/IV	2018/IV	2017/IV - 2018/IV
	Per cent, %	Per cent, %	Percentage points
Sex			
Both sexes	17,2	17,6	0,4
Males	12,7	12,4	-0,3
Females	22,0	23,3	1,2

**Appendix table 34. Employees aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV**

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Industry	TOL 2008				
Industries total	00-99	2 172	2 205	33	1,5
A, B Agriculture, forestry and fishing; mining and quarrying	01-09	35	34	-1	-2,3
Agriculture	01	17	13	-3	-20,0
C Manufacturing	10-33	307	315	8	2,6
Manufacture of food products, beverages and textiles	10-15	40	43	3	7,8
Manufacture of wood products, paper and paper products; printing and reproduction of recorded media	16-18	42	46	4	10,3
Manufacture of chemicals and chemical products and basic pharmaceutical products	19-23	45	45	-1	-1,1
Manufacture of basic metals and of fabricated metal products, except machinery and equipment	24-25	50	53	3	6,0
Manufacture of electronic and optical products, electrical equipment, machinery and vehicles	26-30	102	101	-2	-1,5
Manufacture of furniture, other manufacturing; repair and installation of machinery and equipment	31-33	28	28	-0	-1,3
D, E Electricity, gas, steam and air conditioning and water supply; sewerage and waste management	35-39	27	23	-4	-14,6
F Construction	41-43	149	155	6	3,9
Construction of buildings	41	53	56	3	4,8
Specialised construction activities	43	78	81	3	4,4
G Wholesale and retail trade; repair of motor vehicles and motorcycles	45-47	248	253	4	1,8
Wholesale and retail trade and repair of motor vehicles and motorcycles	45	37	40	3	8,1
Wholesale trade, except of motor vehicles and motorcycles	46	73	81	7	9,7
Retail trade, except of motor vehicles and motorcycles	47	138	132	-6	-4,2
H Transportation and storage	49-53	125	126	2	1,2
Land, water and air transport	49-51	75	76	1	1,3
Warehousing and support activities for transportation; postal and courier activities	52-53	50	51	1	1,1
I Accommodation and food service activities	55-56	74	77	3	3,4
J Information and communication	58-63	94	106	12	12,4
K, L Financial, insurance and real estate activities	64-68	68	68	-0	-0,6
M Professional, scientific and technical activities	69-75	133	139	6	4,9
Architectural and engineering activities; technical testing and analysis	71	58	64	6	10,3
N Administrative and support service activities	77-82	95	96	1	0,9
Services to buildings and landscape activities	81	54	56	2	3,4
O Public administration and defence; compulsory social security	84	116	114	-2	-1,9
P Education	85	186	184	-2	-1,2
Q Human health and social work activities	86-88	389	392	3	0,7
Human health activities	86	174	168	-6	-3,2

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Residential care activities	87	84	93	9	10,7
Social work activities without accommodation	88	131	131	-1	-0,4
R Arts, entertainment and recreation	90-93	50	53	3	5,3
S-U Other service activities	94-99	69	64	-5	-7,4
X Industry unknown	00	5	6	.	.



**Appendix table 35. Hours actually worked of employees aged 15-74 by industry (TOL 2008) 2017/IV - 2018/IV**

	TOL 2008	Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		Million hours	Million hours	Million hours	Per cent, %
Industry	TOL 2008				
Industries total	00-99	894,4	910,3	15,9	1,8
A, B Agriculture, forestry and fishing; mining and quarrying	01-09	16,5	16,0	-0,5	-2,9
Agriculture	01	8,0	7,2	-0,8	-10,3
C Manufacturing	10-33	136,8	138,7	1,9	1,4
Manufacture of food products, beverages and textiles	10-15	16,6	18,4	1,8	11,1
Manufacture of wood products, paper and paper products; printing and reproduction of recorded media	16-18	18,4	20,3	1,9	10,2
Manufacture of chemicals and chemical products and basic pharmaceutical products	19-23	19,9	18,7	-1,2	-5,9
Manufacture of basic metals and of fabricated metal products, except machinery and equipment	24-25	21,5	23,5	2,0	9,4
Manufacture of electronic and optical products, electrical equipment, machinery and vehicles	26-30	47,4	46,2	-1,2	-2,5
Manufacture of furniture, other manufacturing; repair and installation of machinery and equipment	31-33	13,0	11,5	-1,5	-11,6
D, E Electricity, gas, steam and air conditioning and water supply; sewerage and waste management	35-39	12,5	10,4	-2,1	-16,9
F Construction	41-43	67,9	71,0	3,1	4,6
Construction of buildings	41	24,8	25,4	0,6	2,4
Specialised construction activities	43	34,9	37,7	2,8	8,0
G Wholesale and retail trade; repair of motor vehicles and motorcycles	45-47	99,7	103,2	3,5	3,5
Wholesale and retail trade and repair of motor vehicles and motorcycles	45	17,0	18,4	1,5	8,8
Wholesale trade, except of motor vehicles and motorcycles	46	32,9	37,6	4,7	14,2
Retail trade, except of motor vehicles and motorcycles	47	49,9	47,2	-2,7	-5,3
H Transportation and storage	49-53	52,6	55,0	2,4	4,5
Land, water and air transport	49-51	33,5	35,0	1,5	4,4
Warehousing and support activities for transportation; postal and courier activities	52-53	19,1	20,0	0,9	4,6
I Accommodation and food service activities	55-56	26,3	30,3	4,0	15,3
J Information and communication	58-63	40,1	47,3	7,1	17,8
K, L Financial, insurance and real estate activities	64-68	28,7	29,1	0,4	1,5
M Professional, scientific and technical activities	69-75	58,1	57,5	-0,6	-1,0
Architectural and engineering activities; technical testing and analysis	71	25,4	26,8	1,4	5,5
N Administrative and support service activities	77-82	37,5	38,8	1,3	3,3
Services to buildings and landscape activities	81	20,6	21,4	0,8	3,7
O Public administration and defence; compulsory social security	84	48,7	47,0	-1,6	-3,4
P Education	85	69,6	67,4	-2,2	-3,1
Q Human health and social work activities	86-88	154,4	155,2	0,8	0,5

		Year/Quarter		Change	Change
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		Million hours	Million hours	Million hours	Per cent, %
Human health activities	86	71,1	67,1	-4,0	-5,6
Residential care activities	87	33,7	38,3	4,6	13,5
Social work activities without accommodation	88	49,5	49,7	0,2	0,5
R Arts, entertainment and recreation	90-93	17,9	17,6	-0,3	-1,5
S-U Other service activities	94-99	24,9	22,8	-2,1	-8,5
X Industry unknown	00	2,3	3,1	.	.

**Appendix table 36. Employees aged 15-74 by type of employment relationship 2017/IV - 2018/IV**

	Year/Quarter		Change	Change
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Employment relationship				
Employees total	2 172	2 205	33	1,5
- permanent full-time work	1 605	1 621	16	1,0
- permanent part-time work	242	249	7	3,0
- temporary (fixed-term) full-time work	216	217	1	0,6
- temporary (fixed-term) part-time work	109	118	9	7,8
Temporary (fixed-term) work total	325	335	10	3,0
Part-time work total	351	367	16	4,5

**Appendix table 37. Employees aged 15-74 by type of employment relationship 2017/IV - 2018/IV, %**

	Year/Quarter		Change
	2017/IV	2018/IV	2017/IV - 2018/IV
	Per cent, %	Per cent, %	Percentage points
Employment relationship			
Employees total	100,0	100,0	0,0
- permanent full-time work	73,9	73,5	-0,4
- permanent part-time work	11,1	11,3	0,2
- temporary (fixed-term) full-time work	9,9	9,8	-0,1
- temporary (fixed-term) part-time work	5,0	5,3	0,3
Temporary (fixed-term) work total	15,0	15,2	0,2
Part-time work total	16,2	16,6	0,5

**Appendix table 38. Different types of employment relationships less than 12 month's duration 2017/IV - 2018/IV, persons aged 15-74**

	Year/Quarter		Change	
	2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
	1000 persons	1000 persons	1000 persons	Per cent, %
Employment relationship				
Employees total	459	500	41	8,9
- permanent full-time work	176	199	23	13,1
- permanent part-time work	65	68	3	4,1
- temporary (fixed-term) full-time work	144	150	6	4,1
- temporary (fixed-term) part-time work	74	84	9	12,5
Temporary (fixed-term) work total	218	233	15	7,0
Part-time work total	140	152	12	8,5

**Appendix table 39. Different types of employment relationships less than 12 month's duration 2017/IV - 2018/IV, persons aged 15-74, %**

	Year/Quarter		Change
	2017/IV	2018/IV	2017/IV - 2018/IV
	Per cent, %	Per cent, %	Percentage points
Employment relationship			
Employees total	100,0	100,0	0,0
- permanent full-time work	38,3	39,7	1,5
- permanent part-time work	14,2	13,6	-0,6
- temporary (fixed-term) full-time work	31,3	29,9	-1,4
- temporary (fixed-term) part-time work	16,2	16,7	0,5
Temporary (fixed-term) work total	47,5	46,6	-0,8
Part-time work total	30,5	30,3	-0,1

**Appendix table 40. Unemployed persons by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change	
		2017/IV	2018/IV	2017/IV - 2018/IV	2017/IV - 2018/IV
		1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Age group				
Both sexes	15-74	205	162	-43	-21,1
	15-64	203	160	-43	-21,2
	15-24	41	33	-8	-18,5
	25-34	50	37	-13	-26,1
	35-44	35	29	-6	-17,0
	45-54	37	29	-8	-22,3
	55-64	40	32	-8	-20,3
Males	15-74	113	89	-23	-20,6
	15-64	111	89	-23	-20,5
	15-24	22	19	-3	-14,0
	25-34	28	20	-8	-27,6
	35-44	18	16	-2	-11,3
	45-54	21	15	-7	-32,2
	55-64	22	19	-3	-13,9
Females	15-74	92	72	-20	-21,7
	15-64	92	71	-20	-22,0
	15-24	19	14	-4	-23,6
	25-34	22	17	-5	-24,3
	35-44	17	13	-4	-23,1
	45-54	15	14	-1	-8,4
	55-64	18	13	-5	-28,1

**Appendix table 41. Unemployment rate by sex and age 2017/IV - 2018/IV**

		Year/Quarter		Change
		2017/IV	2018/IV	2017/IV - 2018/IV
		Per cent, %	Per cent, %	Percentage points
Sex	Age group			
Both sexes	15-74	7,6	6,0	-1,6
	15-64	7,8	6,1	-1,7
	15-24	14,3	12,2	-2,1
	25-34	8,7	6,3	-2,3
	35-44	5,8	4,7	-1,1
	45-54	5,8	4,6	-1,2
	55-64	7,9	6,2	-1,7
Males	15-74	8,0	6,4	-1,7
	15-64	8,2	6,5	-1,7
	15-24	15,7	14,0	-1,7
	25-34	8,8	6,3	-2,5
	35-44	5,7	4,9	-0,8
	45-54	6,7	4,6	-2,0
	55-64	8,7	7,4	-1,3
Females	15-74	7,1	5,6	-1,6
	15-64	7,3	5,6	-1,6
	15-24	12,9	10,4	-2,5
	25-34	8,5	6,3	-2,1
	35-44	6,0	4,5	-1,5
	45-54	4,9	4,6	-0,3
	55-64	7,1	5,0	-2,1

**Appendix table 42. Unemployment rates by Regional State Administrative Agencies (AVI) 2017/IV - 2018/IV**

	Year/Quarter		Change
	2017/IV	2018/IV	2017/IV - 2018/IV
	Per cent, %	Per cent, %	Percentage points
Regional State Administrative Agencies			
Whole country (incl. Åland)	7,6	6,0	-1,6
Southern Finland AVI	7,0	5,9	-1,1
Southwestern Finland AVI	7,1	5,7	-1,3
Eastern Finland AVI	8,7	5,7	-3,0
Western and Inland Finland AVI	8,5	6,2	-2,3
Northern Finland AVI	7,7	6,3	-1,4
Lapland AVI	9,5	7,4	-2,2

**Appendix table 43. Unemployment rates by region (2011) 2017/IV - 2018/IV**

Region	Year/Quarter		Change
	2017/IV	2018/IV	2017/IV - 2018/IV
	Per cent, %	Per cent, %	Percentage points
Whole country (incl. Åland)	7,6	6,0	-1,6
Uusimaa	6,9	6,0	-0,9
Varsinais-Suomi	6,8	6,3	-0,5
Satakunta	7,7	4,5	-3,2
Kanta-Häme	6,6	4,3	-2,3
Pirkanmaa	9,9	7,5	-2,3
Päijät-Häme	4,7	4,9	0,2
Kymenlaakso	10,0	6,9	-3,1
South Karelia	8,6	6,7	-1,9
Etelä-Savo	9,3	7,1	-2,1
Pohjois-Savo	7,6	4,9	-2,7
North Karelia	9,9	5,7	-4,2
Central Finland	9,7	7,7	-2,1
South Ostrobothnia	6,0	3,4	-2,6
Ostrobothnia	7,1	3,7	-3,3
Central Ostrobothnia	4,4	4,3	-0,1
North Ostrobothnia	7,6	5,7	-1,9
Kainuu	8,4	10,3	1,9
Lapland	9,5	7,4	-2,2

# Appendix tables 2018, year

**Appendix table 44. Key indicators in the Labour Force Survey by sex in 2016 - 2018**

		Year			Change
		2016	2017	2018	2017/2018
		Per cent, %	Per cent, %	Per cent, %	Percentage points
Indicator	Sex				
Employment rate, persons aged 15-64	Both sexes	68,7	69,6	71,7	2,1
	Males	69,8	70,7	72,7	2,0
	Females	67,6	68,5	70,6	2,1
Unemployment rate, persons aged 15-74	Both sexes	8,8	8,6	7,4	-1,3
	Males	9,0	8,9	7,4	-1,5
	Females	8,6	8,4	7,3	-1,1
Activity rate, persons aged 15-74	Both sexes	65,3	65,8	66,5	0,7
	Males	67,5	68,1	68,6	0,5
	Females	63,1	63,5	64,3	0,8

**Appendix table 45. Population aged 15-74 by labour force status and sex in 2016 - 2018**

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Labour force status					
Both sexes	Population total	4 109	4 114	4 124	10	0,3
	Active population total	2 685	2 707	2 742	35	1,3
	- employed	2 448	2 473	2 540	67	2,7
	- unemployed	237	234	202	-32	-13,7
	Inactive population	1 424	1 407	1 382	-24	-1,7
Males	Population total	2 061	2 066	2 072	6	0,3
	Active population total	1 392	1 407	1 422	15	1,1
	- employed	1 267	1 282	1 317	35	2,7
	- unemployed	126	125	106	-19	-15,5
	Inactive population	669	659	650	-9	-1,3
Females	Population total	2 047	2 048	2 052	4	0,2
	Active population total	1 293	1 300	1 319	19	1,5
	- employed	1 182	1 191	1 223	32	2,7
	- unemployed	111	109	96	-13	-11,7
	Inactive population	755	748	732	-15	-2,1

**Appendix table 46. Employment rates by sex and age in 2016 - 2018**

		Year			Change
		2016	2017	2018	2017/2018
		Per cent, %	Per cent, %	Per cent, %	Percentage points
Sex	Age group				
Both sexes	15-74	59,6	60,1	61,6	1,5
	15-64	68,7	69,6	71,7	2,1
	15-24	40,5	41,4	42,8	1,4
	25-34	74,8	74,9	76,8	2,0
	35-44	82,2	82,7	85,1	2,4
	45-54	82,8	84,3	85,5	1,2
	55-64	61,4	62,5	65,4	2,9
	65-74	10,6	10,6	11,0	0,3
Males	15-74	61,4	62,1	63,5	1,5
	15-64	69,8	70,7	72,7	2,0
	15-24	37,9	39,2	40,3	1,0
	25-34	80,6	79,7	82,2	2,6
	35-44	85,3	85,8	87,9	2,1
	45-54	83,2	84,4	85,7	1,3
	55-64	59,8	61,7	64,3	2,6
	65-74	13,5	14,0	14,3	0,3
Females	15-74	57,7	58,2	59,6	1,5
	15-64	67,6	68,5	70,6	2,1
	15-24	43,2	43,6	45,4	1,8
	25-34	68,6	69,8	71,1	1,3
	35-44	78,9	79,4	82,2	2,7
	45-54	82,4	84,2	85,3	1,1
	55-64	63,0	63,4	66,5	3,2
	65-74	8,0	7,6	7,9	0,4



**Appendix table 47. Employed person aged 15-74 by educational level and sex in 2015 - 2017**

		Year			Change	Change
		2015	2016	2017	2016/2017	2016/2017
		1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Level of education					
Both sexes	Total	2 437	2 448	2 473	25	1,0
	Upper secondary education (3,4)	1 098	1 103	1 097	-6	-0,5
	Tertiary education total (5,6,7,8)	1 057	1 064	1 102	39	3,6
	- lowest level tertiary education (5)	293	282	273	-9	-3,2
	- lower university level (6)	382	399	423	24	6,0
	- higher university or doctorate level (7,8)	382	383	407	24	6,2
	No post-basic level education or level of education unknown	282	282	274	-8	-2,7
Males	Total	1 249	1 267	1 282	16	1,2
	Upper secondary education (3,4)	607	620	623	4	0,6
	Tertiary education total (5,6,7,8)	461	466	479	13	2,8
	- lowest level tertiary education (5)	112	109	105	-4	-3,3
	- lower university level (6)	174	181	191	10	5,4
	- higher university or doctorate level (7,8)	175	176	183	7	3,9
	No post-basic level education or level of education unknown	180	181	180	-1	-0,6
Females	Total	1 188	1 182	1 191	9	0,8
	Upper secondary education (3,4)	491	483	473	-10	-2,0
	Tertiary education total (5,6,7,8)	595	598	623	26	4,3
	- lowest level tertiary education (5)	181	173	168	-5	-3,1
	- lower university level (6)	207	218	232	14	6,5
	- higher university or doctorate level (7,8)	207	207	224	17	8,1
	No post-basic level education or level of education unknown	102	101	94	-7	-6,5

**Appendix table 48. Employed persons aged 15-74 by industry (TOL 2008) in 2016 - 2018**

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Industry	TOL 2008					
Industries total	00-99	2 448	2 473	2 540	67	2,7
A, B Agriculture, forestry and fishing; mining and quarrying	01-09	101	99	101	2	2,1
Agriculture	01	71	71	72	1	1,2
C Manufacturing	10-33	327	326	337	11	3,4
Manufacture of food products, beverages and textiles	10-15	45	43	47	3	7,8
Manufacture of wood products, paper and paper products; printing and reproduction of recorded media	16-18	50	45	49	4	9,7
Manufacture of chemicals and chemical products and basic pharmaceutical products	19-23	47	46	48	2	3,5
Manufacture of basic metals and of fabricated metal products, except machinery and equipment	24-25	54	55	55	0	-0,4
Manufacture of electronic and optical products, electrical equipment, machinery and vehicles	26-30	101	103	104	1	1,4
Manufacture of furniture, other manufacturing; repair and installation of machinery and equipment	31-33	30	34	35	1	2,1
D, E Electricity, gas, steam and air conditioning and water supply; sewerage and waste management	35-39	29	29	24	-4	-15,5
F Construction	41-43	178	187	198	11	5,9
Construction of buildings	41	68	70	73	4	5,3
Specialised construction activities	43	95	97	104	7	7,1
G Wholesale and retail trade; repair of motor vehicles and motorcycles	45-47	290	282	292	11	3,7
Wholesale and retail trade and repair of motor vehicles and motorcycles	45	41	43	47	4	9,4
Wholesale trade, except of motor vehicles and motorcycles	46	89	84	87	3	3,1
Retail trade, except of motor vehicles and motorcycles	47	161	155	159	4	2,5
H Transportation and storage	49-53	141	139	143	3	2,2
Land, water and air transport	49-51	90	89	91	2	1,9
Warehousing and support activities for transportation; postal and courier activities	52-53	51	50	52	1	2,8
I Accommodation and food service activities	55-56	85	85	86	1	1,4
J Information and communication	58-63	101	106	114	9	8,4
K, L Financial, insurance and real estate activities	64-68	75	81	77	-4	-5,0
M Professional, scientific and technical activities	69-75	163	172	179	8	4,6
Architectural and engineering activities; technical testing and analysis	71	61	63	71	7	11,8
N Administrative and support service activities	77-82	109	112	112	0	0,1

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Services to buildings and landscape activities	81	64	64	65	1	1,6
O Public administration and defence; compulsory social security	84	111	115	116	1	0,4
P Education	85	173	181	184	3	1,6
Q Human health and social work activities	86-88	409	404	417	13	3,2
Human health activities	86	190	187	189	2	1,1
Residential care activities	87	91	87	96	9	10,1
Social work activities without accommodation	88	128	131	133	2	1,7
R Arts, entertainment and recreation	90-93	63	66	65	-1	-1,7
S-U Other service activities	94-99	85	87	88	1	1,3
X Industry unknown	00	8	5	7	2	51,7

**Appendix table 49. Hours actually worked by employed persons aged 15-74 by industry (TOL 2008) in 2016 - 2018**

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		Million hours	Million hours	Million hours	Million hours	Per cent, %
Industry	TOL 2008					
Industries total	00-99	4011,6	4040,4	4132,7	92,2	2,3
A, B Agriculture, forestry and fishing; mining and quarrying	01-09	199,4	195,8	198,2	2,3	1,2
Agriculture	01	149,5	146,7	148,7	2,0	1,4
C Manufacturing	10-33	565,1	571,1	580,6	9,5	1,7
Manufacture of food products, beverages and textiles	10-15	75,8	72,7	77,3	4,6	6,3
Manufacture of wood products, paper and paper products; printing and reproduction of recorded media	16-18	85,7	77,8	84,1	6,3	8,1
Manufacture of chemicals and chemical products and basic pharmaceutical products	19-23	80,4	79,8	79,9	0,1	0,1
Manufacture of basic metals and of fabricated metal products, except machinery and equipment	24-25	95,3	96,8	97,4	0,6	0,6
Manufacture of electronic and optical products, electrical equipment, machinery and vehicles	26-30	174,6	182,4	182,1	-0,3	-0,2
Manufacture of furniture, other manufacturing; repair and installation of machinery and equipment	31-33	53,4	61,5	59,8	-1,6	-2,7
D, E Electricity, gas, steam and air conditioning and water supply; sewerage and waste management	35-39	49,0	49,9	40,9	-9,0	-18,1
F Construction	41-43	328,8	339,6	359,4	19,7	5,8
Construction of buildings	41	123,6	123,2	131,8	8,6	7,0
Specialised construction activities	43	177,5	180,2	190,8	10,6	5,9
G Wholesale and retail trade; repair of motor vehicles and motorcycles	45-47	471,2	457,1	474,0	16,9	3,7
Wholesale and retail trade and repair of motor vehicles and motorcycles	45	73,0	78,8	88,1	9,3	11,8
Wholesale trade, except of motor vehicles and motorcycles	46	157,3	149,0	152,9	3,9	2,6
Retail trade, except of motor vehicles and motorcycles	47	240,9	229,3	233,0	3,7	1,6
H Transportation and storage	49-53	246,9	239,5	245,8	6,3	2,6
Land, water and air transport	49-51	168,2	164,0	167,3	3,3	2,0
Warehousing and support activities for transportation; postal and courier activities	52-53	78,8	75,5	78,5	3,0	4,0
I Accommodation and food service activities	55-56	131,1	126,4	132,0	5,6	4,4
J Information and communication	58-63	172,0	179,3	191,9	12,7	7,1
K, L Financial, insurance and real estate activities	64-68	125,6	132,8	126,7	-6,2	-4,6
M Professional, scientific and technical activities	69-75	270,8	286,1	291,4	5,3	1,9
Architectural and engineering activities; technical testing and analysis	71	102,1	105,2	116,8	11,7	11,1
N Administrative and support service activities	77-82	172,3	178,7	176,4	-2,3	-1,3

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		Million hours	Million hours	Million hours	Million hours	Per cent, %
Services to buildings and landscape activities	81	99,8	100,2	100,1	-0,1	-0,1
O Public administration and defence; compulsory social security	84	184,4	188,7	186,7	-1,9	-1,0
P Education	85	242,5	255,5	256,8	1,3	0,5
Q Human health and social work activities	86-88	624,1	614,8	640,8	26,0	4,2
Human health activities	86	289,3	286,6	291,3	4,7	1,6
Residential care activities	87	144,3	139,2	151,7	12,4	8,9
Social work activities without accommodation	88	190,5	188,9	197,8	8,9	4,7
R Arts, entertainment and recreation	90-93	89,2	90,7	88,6	-2,1	-2,3
S-U Other service activities	94-99	126,6	126,0	129,9	3,8	3,1
X Industry unknown	00	12,5	8,5	12,7	4,2	49,4

**Appendix table 50. Employed persons aged 15-74 by employer sector and sex in 2016 - 2018**

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Employer sector					
Both sexes	Employer sector total (incl. employer sector unknown)	2 448	2 473	2 540	67	2,7
	Private sector	1 783	1 794	1 862	68	3,8
	Public sector	657	674	673	-1	-0,2
	- central government	129	141	140	-1	-0,7
	- local government	528	533	532	0	-0,1
Males	Employer sector total (incl. employer sector unknown)	1 267	1 282	1 317	34	2,7
	Private sector	1 080	1 087	1 121	34	3,1
	Public sector	183	193	193	0	0,1
	- central government	65	68	69	1	1,6
	- local government	118	125	124	-1	-0,7
Females	Employer sector total (incl. employer sector unknown)	1 182	1 191	1 223	32	2,7
	Private sector	703	707	741	34	4,8
	Public sector	474	481	479	-2	-0,3
	- central government	64	73	71	-2	-2,8
	- local government	411	408	408	0	0,1

**Appendix table 51. Employed persons aged 15-74 by region (2011) in 2016 - 2018**

Region	Year			Change	
	2016	2017	2018	2017/2018	2017/2018
	1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Whole country	2 448	2 473	2 540	67	2,7
Uusimaa	808	816	839	23	2,9
Varsinais-Suomi	209	213	224	10	4,9
Satakunta	93	92	96	4	4,5
Kanta-Häme	75	79	79	0	-0,6
Pirkanmaa	219	225	233	8	3,7
Päijät-Häme	88	85	88	2	2,5
Kymenlaakso	69	70	71	1	1,4
South Karelia	53	52	54	2	4,7
Etelä-Savo	60	59	60	0	0,8
Pohjois-Savo	105	106	106	0	-0,2
North Karelia	64	65	68	4	5,5
Central Finland	114	116	118	2	2,0
South Ostrobothnia	84	84	87	3	3,8
Ostrobothnia	85	82	84	2	1,9
Central Ostrobothnia	31	31	30	-1	-4,0
North Ostrobothnia	172	180	184	3	1,7
Kainuu	29	29	28	-1	-3,0
Lapland	76	73	76	4	5,1
Åland	16	16	15	0	-1,8

**Appendix table 52. Employees aged 15-74 by type of employment relationship and sex in 2016 - 2018**

		Year			Change	Change
		2016	2017	2018	2017/2018	2017/2018
		1000 persons	1000 persons	1000 persons	1000 persons	Per cent, %
Sex	Employment relationship					
Both sexes	Employees total	2 105	2 147	2 204	57	2,7
	- permanent full-time work	1 545	1 571	1 608	37	2,3
	- permanent part-time work	227	232	234	2	1,0
	- temporary (fixed-term) full-time work	239	245	252	8	3,1
	- temporary (fixed-term) part-time work	94	100	110	10	10,3
	Temporary (fixed-term) work total	333	345	363	18	5,2
	Part-time work total	321	332	344	13	3,8
Males	Employees total	1 034	1 064	1 094	30	2,8
	- permanent full-time work	830	855	875	20	2,4
	- permanent part-time work	69	68	72	4	5,7
	- temporary (fixed-term) full-time work	101	105	109	4	4,3
	- temporary (fixed-term) part-time work	34	36	38	1	3,9
	Temporary (fixed-term) work total	136	141	147	6	4,2
	Part-time work total	103	104	110	5	5,1
Females	Employees total	1 071	1 083	1 110	27	2,5
	- permanent full-time work	715	716	732	17	2,3
	- permanent part-time work	159	164	162	-2	-1,0
	- temporary (fixed-term) full-time work	137	140	143	3	2,2
	- temporary (fixed-term) part-time work	60	64	73	9	14,0
	Temporary (fixed-term) work total	197	204	216	12	5,9
	Part-time work total	219	227	235	7	3,2

**Appendix table 53. Unemployment rates by sex and age in 2016 - 2018**

		Year			Change
		2016	2017	2018	2017/2018
		Per cent, %	Per cent, %	Per cent, %	Percentage points
Sex	Age group				
Both sexes	15-74	8,8	8,6	7,4	-1,3
	15-64	9,0	8,8	7,5	-1,3
	15-24	20,1	20,1	17,0	-3,1
	25-34	8,6	8,7	7,8	-0,9
	35-44	6,7	6,3	5,1	-1,2
	45-54	7,0	6,4	5,3	-1,1
	55-64	7,5	7,8	6,9	-0,9
Males	15-74	9,0	8,9	7,4	-1,5
	15-64	9,3	9,1	7,6	-1,5
	15-24	21,8	20,9	17,3	-3,7
	25-34	8,4	8,8	7,7	-1,1
	35-44	6,5	6,0	5,1	-0,9
	45-54	7,5	7,0	5,3	-1,7
	55-64	8,2	8,7	7,8	-0,9
Females	15-74	8,6	8,4	7,3	-1,1
	15-64	8,7	8,5	7,4	-1,1
	15-24	18,6	19,3	16,8	-2,5
	25-34	8,9	8,6	7,9	-0,7
	35-44	7,0	6,5	5,1	-1,5
	45-54	6,5	5,8	5,4	-0,4
	55-64	6,9	7,0	6,0	-1,0



**Appendix table 54. Unemployment rates by region (2011) in 2016 - 2018, persons aged 15-74**

Region	Year			Change
	2016	2017	2018	2017/2018
	Per cent, %	Per cent, %	Per cent, %	Percentage points
Whole country (incl. Åland)	8,8	8,6	7,4	-1,3
Uusimaa	7,4	7,7	6,9	-0,8
Varsinais-Suomi	9,6	8,7	6,9	-1,8
Satakunta	9,5	8,7	6,0	-2,7
Kanta-Häme	6,6	7,2	6,5	-0,6
Pirkanmaa	10,8	10,5	9,0	-1,5
Päijät-Häme	8,2	7,4	7,5	0,1
Kymenlaakso	11,5	10,4	9,1	-1,3
South Karelia	8,7	9,0	8,2	-0,8
Etelä-Savo	10,1	11,2	8,6	-2,6
Pohjois-Savo	9,3	8,3	7,7	-0,7
North Karelia	14,4	11,8	8,9	-3,0
Central Finland	10,6	10,6	8,9	-1,7
South Ostrobothnia	7,8	7,2	4,4	-2,7
Ostrobothnia	5,2	7,1	4,9	-2,2
Central Ostrobothnia	5,1	5,5	6,7	1,2
North Ostrobothnia	9,8	8,8	7,3	-1,4
Kainuu	10,4	12,4	10,8	-1,6
Lapland	10,7	10,5	8,9	-1,7

**Appendix table 55. Unemployment rates by educational level and sex in 2015 - 2017, persons aged 15-74**

		Year			Change
		2015	2016	2017	2016/2017
		Per cent, %	Per cent, %	Per cent, %	Percentage points
Sex	Level of education				
Both sexes	Total	9,4	8,8	8,6	-0,2
	Upper secondary education (3,4)	10,6	9,6	9,6	0,1
	Tertiary education total (5,6,7,8)	6,0	5,9	5,3	-0,5
	- lowest level tertiary education (5)	5,2	5,3	5,3	0,0
	- lower university level (6)	6,8	6,4	5,5	-1,0
	- higher university or doctorate level (7,8)	5,7	5,8	5,3	-0,5
	No post-basic level education or level of education unknown	16,2	16,0	16,7	0,6
Males	Total	9,9	9,0	8,9	-0,2
	Upper secondary education (3,4)	10,8	9,9	9,7	-0,2
	Tertiary education total (5,6,7,8)	6,5	6,0	5,3	-0,7
	- lowest level tertiary education (5)	5,8	5,7	5,1	-0,6
	- lower university level (6)	7,6	6,9	6,1	-0,8
	- higher university or doctorate level (7,8)	5,8	5,2	4,7	-0,6
	No post-basic level education or level of education unknown	14,7	13,5	14,6	1,2
Females	Total	8,8	8,6	8,4	-0,2
	Upper secondary education (3,4)	10,3	9,1	9,5	0,4
	Tertiary education total (5,6,7,8)	5,6	5,8	5,3	-0,4
	- lowest level tertiary education (5)	4,9	5,0	5,4	0,4
	- lower university level (6)	6,1	6,0	4,9	-1,1
	- higher university or doctorate level (7,8)	5,6	6,2	5,7	-0,5
	No post-basic level education or level of education unknown	18,9	20,3	20,3	0,0

# Appendix figures 2018, December

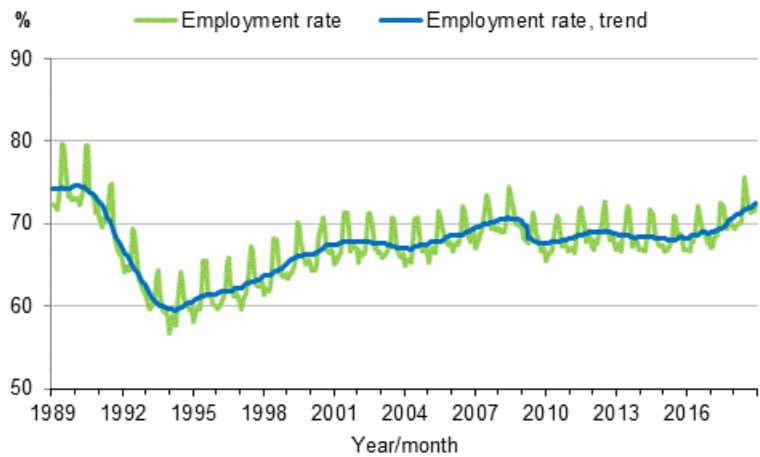
**Appendix figure 1. Employment rate and trend of employment rate 2008/12–2018/12, persons aged 15–64**



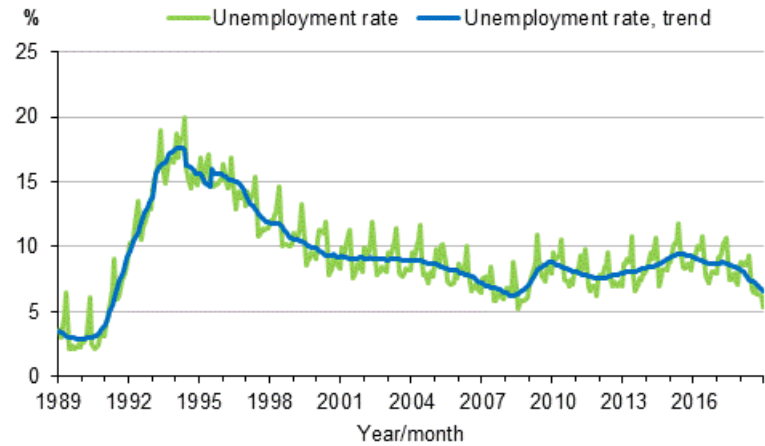
**Appendix figure 2. Unemployment rate and trend of unemployment rate 2008/12–2018/12, persons aged 15–74**



**Appendix figure 3. Employment rate and trend of employment rate 1989/01–2018/12, persons aged 15–64**



**Appendix figure 4. Unemployment rate and trend of unemployment rate 1989/01–2018/12, persons aged 15–74**



# Quality Description: Labour force survey

## 1. Relevance of statistical information

The Labour Force Survey is a sample survey used in the compilation of monthly, quarterly and annual statistics on participation in the labour market, employment, unemployment and working hours among the population aged between 15 and 74. The data content of the Survey is based on an EU regulation, and the Survey sample includes approximately 12,000 persons every month. The information provided by the respondents is used to draw a picture of the activities of the entire population aged between 15 and 74 on the labour market during one week. In the basic classification of labour market status, the population is divided into the employed, the unemployed and the economically inactive. The active population (labour force) consists of the employed and the unemployed.

The Survey provides an up-to-date and comprehensive picture of the active population (labour force) and changes on the labour market. Public attention focuses each month especially on the changes in employment and unemployment from the corresponding month of the previous year. Seasonally adjusted figures are used to monitor the trend of the changes. The Survey also provides information about persons of working age who are not employed or job seekers. Since 2003, information has also been obtained from a subsample about the structure of households and the activities of all household members aged 15 to 74 relative to the labour market. A description of the data content of the Labour Force Survey is available at:

[http://tilastokeskus.fi/til/tyti/tyti\\_2008-02-19\\_tlu\\_001\\_en.html](http://tilastokeskus.fi/til/tyti/tyti_2008-02-19_tlu_001_en.html).

The monthly and quarterly results of the Labour Force Survey describe the seasonal and trend variation of employment. The Labour Force Survey time series describe long term changes in the labour market. Annual averages describe the active population, that is, the employed and the unemployed, and the economically inactive persons by, for instance, industry, occupation, education, age, gender and area.

The results of the Survey are used in preparing, among other things, labour market projections and plans, as support for decision-making and in the monitoring of the effects of different measures on employment. Key users of the results are ministries, authorities responsible for regional planning, employers' and employees' organisations, universities and research institutes, international organisations and the European Union. At Statistics Finland the data are used in, for instance, calculations of National Accounts. The Statistical Office of the European Communities, Eurostat, steers the content of the Survey and monitors its quality. Eurostat produces structural indicators and other statistics from the quarterly data that are submitted to it.

The concepts and definitions used in the Survey comply with the recommendations of ILO, the International Labour Organisation of the UN, and the regulations of the European Union on official statistics. The current data content of the Labour Force Survey is mainly based on the EU Regulations concerning Labour Force Surveys (Nos 577/98, 2257/2003 and 430/2005). A detailed description of the EU Labour Force Survey is available at:

[http://ec.europa.eu/eurostat/statistics-explained/index.php/Labour\\_market\\_and\\_Labour\\_force\\_survey\\_\(LFS\)\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Labour_market_and_Labour_force_survey_(LFS)_statistics).

Since 1999 a harmonised EU ad hoc survey with an annually changing topic has been conducted in connection with the Labour Force Survey. Further information about the ad hoc surveys can be found (in Finnish) at: [http://tilastokeskus.fi/til/tyti/tyti\\_2018-04-12\\_men\\_001.pdf](http://tilastokeskus.fi/til/tyti/tyti_2018-04-12_men_001.pdf).

Concepts:

- A person is **employed** if he/she has during the survey week been in gainful employment at least one hour against wages or salary or fringe benefits, or to make profit. Employees temporarily absent from work during the survey week are also classified as employed if the reason for absence is maternity or paternity leave or own illness or the absence has lasted for under three months. A self-employed person or an unpaid worker in an enterprise of a family member is calculated in employed regardless of the length or reason for absence.
- A person is **unemployed** if he/she is without work during the survey week (not in paid employment or working as self-employed), has actively sought employment in the past four weeks as an employee or self-employed and would be available for work within two weeks. A person who is without work

and waiting for an agreed job to start within three months is also classified as unemployed if he/she could start work within two weeks. Persons laid off for the time being who fulfil the above-mentioned criteria are also counted as unemployed.

- All persons aged 15 to 74 who were employed or unemployed during the survey week belong to the **active population**. The concept of labour force can also be used of the active population.
- The **economically inactive population** consists of persons who are not employed or unemployed during the survey week. The concept of persons not in labour force can also be used of the inactive population.

Explanations for other concepts of the Labour Force Survey can be found at:

[http://tilastokeskus.fi/til/tyti/kas\\_en.html](http://tilastokeskus.fi/til/tyti/kas_en.html).

**The classifications** used in the Labour Force Survey include the Standard Industrial Classification (TOL 2008, NACE Rev. 2), the Classification of Occupations 2010 (ISCO-08), the Classification of Socio-economic Groups 1989 (based on the Classification of Occupations 2010) and the Classification of Education 2016 (ISCED 2011) as well as the regional classification into Major Regions, Regional State Administrative Agencies (AVI), Centres for Economic Development, Transport and the Environment (ELY Centre) and Regions.

## 2. Methodological description of the statistical survey

The population of the Labour Force Survey consists of persons aged between 15 and 74 who are permanent residents of Finland. The population also comprises persons residing temporarily (for under one year) abroad as well as foreign nationals registered in the Finnish Population Information System whose stay in Finland will last for at least one year (<http://vrk.fi/en/registration-of-foreign-citizens> ).

The sample of the Labour Force Survey is drawn twice a year as a stratified random sample from Statistics Finland's population database, which is based on the Central Population Register. The survey is a panel survey in which one person is interviewed five times. The interviews are conducted every three months, apart from the fourth interview which is conducted six months after the third interview. The first and last interviews are 15 months apart. The sample of each month consists of approximately 12,000 persons, which is, on the average, every 300th person in the population. The sample for one survey month consists of five rotation groups which have entered the survey at different points of time. The sample changes gradually so that different persons answer the questions during three consecutive months. In consecutive quarters three-fifths of the respondents are the same. In consecutive years the overlap is two-fifths. The data are collected from all weeks of the year.

In most European countries the Labour Force Survey data are collected from a sample of households, which means that all members of a household living at the same address are interviewed at the same time. Besides Finland, Sweden, Denmark and Switzerland are the only other countries where the sample is based on individual persons, i.e. only the target persons drawn into the sample are interviewed. However, the EU regulation also requires data concerning households and in Finland this has been solved by exploiting the panel nature of the Labour Force Survey. In addition to the basic interview, a household interview is conducted on the fifth interview round to ascertain the members who belong to the household of the interviewee and the activity of the household members aged 15 to 74 on the labour market. So that the data would describe the whole population, a supplementing sample is added to it of households in which all members are aged 75 or over. Children under the age of 15 and persons aged over 75 are not interviewed in the Labour Force Survey, but certain data are imputed for them to describe their status on the labour market.

The household data enable examinations of, for instance, employment in the family and the joint status of both spouses on the labour market. In 2017, the household data comprised approximately 49,000 persons who formed 21,000 households. The household data for the Labour Force Survey have been collected by the present method since 2003 and the data can mainly be published starting from the year 2004.

The data content of the survey varies by survey round. Certain basic pieces of information are inquired in the first round and checks are then made in subsequent rounds to see whether they have remained unchanged. The data content is wider in the last, or the fifth, survey round which includes the household module, the annual ad hoc module with variable topics, as well as certain additional questions concerning the main job.

Statistics Finland's interviewers collect the data with computer-assisted telephone interviews. In 2017, around 98,000 persons were interviewed for the Labour Force Survey. The response rate of this survey was 67 per cent, on average.

The results from the sample are weighted to correspond to the entire population aged between 15 and 74. The effects of non-response on the results are corrected by using so called weight calibration, in which weighting is used to produce the correct population distributions by area, gender and age. Information from the job seeker register of the Ministry of Economic Affairs and Employment is also used as supplementary data.

Like all figures collected with a sample survey, the figures of the Labour Force Survey are so called estimates. An **estimate** is an estimation of a quality of the population derived by applying a mathematical procedure (estimation) to sample observations. For example, the number of the unemployed published in a certain month is an estimate of the number of unemployed persons aged between 15 and 74 in Finland obtained by such a procedure.

Quarterly and annual estimates are averages of monthly estimates. Working days and hours worked are estimated basing on the number of calendar days in the month concerned. Quarterly and annual estimates of working days and hours worked are sums of monthly estimates.

The employment and unemployment figures of the Labour Force Survey vary relatively regularly in different months of the year. So-called trends are also published from the Labour Force Survey. Variation which occurs annually in similar ways has been removed from these trends. The direction of long-term developments and cyclical variations are easier to see from a trend than from unadjusted monthly data. Due to the method used, the last data of the trend become slightly revised when the data of the following month are inserted into the time series. This preliminary nature of trends should be taken into account when drawing conclusions. Starting from June 2007, the trend components of the time series have been calculated with the Tramo/Seats method recommended by Eurostat, the Statistical Office of the European Communities. Further information about the trend and limitations in its use can be found at: [http://tilastokeskus.fi/til/tramo\\_seats\\_en.html](http://tilastokeskus.fi/til/tramo_seats_en.html).

### 3. Correctness and accuracy of data

The reliability of the figures of the Labour Force Survey is affected by non-response (see above), measurement errors and random variation due to sampling.

Measurement errors arise from, among other things, differences in interpreting or understanding of the questions, respondents' inability to recall or unwillingness to give certain information, or erroneous recording of answers. Development and testing of the questions, interviewer instructions and the user interface, and training of interviewers are measures used to contain measurement errors.

Random variation due to sampling means that figures calculated from different samples deviate somewhat from each other. When evaluating roughly the magnitude of random variation due to sampling in different situations, the main principle is that **1) the larger the sample is from which the figures are calculated and 2) the larger the population described by the figures is, the less uncertainty due to sampling there will be in the figures**. For instance, quarterly figures are more accurate than monthly figures in describing the same phenomenon, as quarterly data have been collected by interviewing three times the number of persons interviewed for monthly data. Annual figures are the most accurate. The latter principle means that the figures of the employed and the unemployed, that is the estimates, based on a sample of the same size are the more accurate the larger the subgroup they apply to. As the relevant subgroup becomes smaller, random variation due to sampling increases. Therefore e.g. the numbers of the unemployed in different age groups or in different areas are not as reliable as the number of all the unemployed.

Inaccuracy due to sampling is assessed with the **standard error** of the estimate. The magnitude of the standard error is influenced by the size of the sample and the variance of the variable being investigated. Standard error can be used to calculate the **confidence interval**, within which the value of the population lies with a certain probability. The **95 per cent confidence interval** used in the Labour Force Survey is **the interval within which the real value of the characteristic being investigated lies with 95 per cent probability**. For instance, if the estimate for the number of unemployed persons in a certain month is 230,000 and its standard error is 7,700, the 95 per cent confidence interval of the number of the unemployed is  $230,000 \pm 15,100$ , i.e. 214,900–245,100 persons. The share to be added to the estimate or deducted from it, in this case 15,100, is obtained by multiplying the estimate's standard error with the 1.96 coefficient of the 95 per cent confidence interval. This share describes the inaccuracy caused by random variation due to sampling and is called the **margin of error**.

#### Examples of the accuracy of the number of the employed and the unemployed by size of subgroup

To illustrate the magnitude of random variation, examples of the estimates of different numbers of the employed and the unemployed, their margins of error and other key figures of reliability are presented in the following tables 1-3. The magnitude of random variation in the examples is a rough estimate of the upper boundary of random variation, when the figure being investigated is **a correspondingly large estimate of the number of the employed or the unemployed by gender, age or region**. In correspondingly large subgroups by industry, the margin of error is wider. The examples in table 1 refer to monthly estimates. Tables 2-3 include the corresponding data for quarterly and annual estimates.

**Table 1. Examples of the accuracy of monthly estimates of different sizes: the numbers of the employed and the unemployed by gender, age and region.**<sup>1)</sup>

	Monthly estimate	Monthly estimate's margins of error (95% confidence interval)	Standard error	Relative standard error
	persons	persons	persons	%
<b>Employed</b>	2 400 000	± 27 800	14 200	0,6
	1 200 000	± 21 000	10 700	0,9
	600 000	± 15 300	7 800	1,3
	300 000	± 11 600	5 900	2,0
	100 000	± 6 700	3 400	3,4
	50 000	± 4 700	2 400	4,8
	10 000	± 2 900	1 500	15,0
<b>Unemployed</b>	230 000	± 15 100	7 700	3,3
	120 000	± 11 800	6 000	5,0
	90 000	± 10 800	5 500	6,1
	60 000	± 9 000	4 600	7,7
	30 000	± 6 900	3 500	11,7
	20 000	± 5 100	2 600	13,0
	10 000	± 3 700	1 900	19,0

1) The data can be used as indicative estimates of the accuracy of comparable numbers of the employed and unemployed by gender, age and region.

We can see from table 1 that if the monthly estimate of the employed in the subgroup is 300,000 persons, the real number of the employed lies, with a probability of 95 per cent, within the range  $300,000 \pm 11,600$  persons. The size of this confidence interval relative to the size of the estimate is clearly larger than the corresponding share in the large estimate on the first row of the table. For estimates of less than 300,000 persons the confidence intervals are relatively even wider.

A comparison of data in tables 1–3 illustrates also that annual and quarterly data are more accurate than monthly data. The 95 per cent confidence interval corresponding to the estimate of the employed in a subgroup of 300,000 persons examined above, that is  $300,000 \pm 6,700$  persons (table 2), is clearly narrower



than the confidence interval of the monthly estimate. Annual estimates are even more accurate than quarterly estimates (table 3). This difference in accuracy is, however, not as large as the corresponding difference between monthly and quarterly data.

**Table 2. Examples of the accuracy of quarterly estimates of different sizes: the numbers of the employed and the unemployed by gender, age and region.**<sup>1)</sup>

	Quarterly estimate	Quarterly estimate's margins of error (95% confidence interval)	Standard error	Relative standard error
	persons	persons	persons	%
<b>Employed</b>	2 400 000	± 16 100	8 200	0,3
	1 200 000	± 12 500	6 400	0,5
	600 000	± 8 800	4 500	0,8
	300 000	± 6 700	3 400	1,1
	100 000	± 4 700	2 400	2,4
	50 000	± 3 900	2 000	4,0
	10 000	± 2 000	1 000	10,0
<b>Unemployed</b>	230 000	± 8 800	4 500	2,0
	120 000	± 6 900	3 500	2,9
	90 000	± 6 100	3 100	3,4
	60 000	± 5 100	2 600	4,3
	30 000	± 3 500	1 800	6,0
	20 000	± 3 100	1 600	8,0
	10 000	± 2 400	1 200	12,0

1) The data can be used as indicative estimates of the accuracy of comparable numbers of the employed and unemployed by gender, age and region.

**Table 3. Examples of the accuracy of annual estimates of different sizes: the numbers of the employed and the unemployed by gender, age and region.**<sup>1)</sup>

	Annual estimate	Annual estimate's margins of error (95% confidence interval)	Standard error	Relative standard error
	persons	persons	persons	%
<b>Employed</b>	2 400 000	± 15 700	8 000	0,3
	1 200 000	± 11 400	5 800	0,5
	600 000	± 7 800	4 000	0,7
	300 000	± 6 100	3 100	1,0
	100 000	± 3 300	1 700	1,7
	50 000	± 2 500	1 300	2,6
	10 000	± 800	400	4,0
<b>Unemployed</b>	230 000	± 7 100	3 600	1,6
	120 000	± 5 700	2 900	2,4
	90 000	± 4 500	2 300	2,6
	60 000	± 3 500	1 800	3,0
	30 000	± 2 400	1 200	4,0
	20 000	± 2 000	1 000	5,0
	10 000	± 1 600	800	8,0

1) The data can be used as indicative estimates of the accuracy of comparable numbers of the employed and unemployed by gender, age and region.

## Statistical description of the reliability of estimation

The estimation procedure of the Labour Force Survey is based on the calibration of weights in which the original sample weights calculated on the basis of the sample design are adjusted with a regression model to get the desired population distributions.

The accuracy of estimates is evaluated on the basis of their standard error. **Standard error** (the square root of the sample variance) describes how neatly the value of the parameter estimated from the observations is concentrated around the parameter of the population. The magnitude of the standard error is affected by sample design, the number of observations in the relevant population or subgroup, variation due to the distribution of the research variable as well as properties of the mathematical formula.

Key figures of reliability derived from the standard error are the confidence intervals and relative standard error. **Confidence interval** describes the width of the range in which the real value of the parameter is relative to the estimate calculated from the sample. When calculating the confidence interval, the desired level of risk is fixed. The 5 per cent risk level applied in the Labour Force Survey means that if the samples were drawn again, in 95 cases out of one hundred the real value of the parameter would be within the confidence interval and in 5 cases out of one hundred it would be outside the confidence interval.

**Relative standard error** (variation coefficient) is the percentage share of the standard error of the estimate. Proportioning the standard error to the estimate's size removes the effect of the scale of the variable. Hence the values of the relative standard error of different variables and the values of the standard error of the same variable in different subgroups are easy to compare with one another.

In the monthly and quarterly data of the Labour Force Survey, the estimator of the standard error is the variance estimator of the generalised regression estimator (GREG). The statistical accuracy of the annual estimates and its evaluation is also affected by the fact that the sample of the Labour Force Survey changes gradually during the year. In consecutive quarters 60 per cent of the respondents are the same. During one year 90 per cent of the interviewees have been interviewed at least twice. The responses given by the same persons in different interviews during the year correlate to one another if the person's labour market status does not change between interviews. To account for this co-dependence of responses, the Labour Force Survey uses an approximation of single stage cluster sampling in which a cluster internal variance is calculated for persons interviewed several times during the year. Clusters are formed on the basis of interviewee's age. Cluster internal variance is zero if the interviewee's labour market status does not change during the year between different interviews.

For example, the standard error calculated for annual estimate of the unemployed in a subgroup of 230,000 persons is 3,600 persons and the confidence interval is  $230,000 \pm 7,100$  persons. If the interviews on which the annual estimate is based had all been with different persons, the standard error of the estimate of the unemployed would have been 2,300 persons and the confidence interval  $230,000 \pm 4,500$  persons.

Interviewing the same persons again in different quarters of the year explains why the difference in the accuracy of the annual and quarterly data of the Labour Force Survey is not as large as could be expected on the basis of the number of interviews conducted.

## 4. Timeliness and promptness of published data

The results of the Labour Force Survey are released monthly, quarterly and annually. Quarterly and annual results are the averages of monthly results, i.e. they describe the situation on an "average" week during the survey period. Data on labour input are sums of the results of periods. The released data are final. Only seasonal adjustment slightly alters the latest seasonally adjusted monthly results. Monthly data are released approximately three weeks from the end of the survey month. Quarterly data are released simultaneously with the last monthly data of each quarter. Quarterly data are statistically more reliable than monthly data and contain more detailed data on, among other things, employment and labour input by industry and more specific regional data. The most detailed results are published in annual statistics. Quarterly deliveries of data are made to the Eurostat, the Statistical Office of the European Communities, which are used to compile statistics on EU Member States.

## 5. Accessibility and transparency/clarity of data

The results of the Labour Force Survey are published in the Labour market series of Official Statistics of Finland. The key monthly, quarterly and annual results are released on predefined days on the Internet on the home page of the Labour Force Survey [http://tilastokeskus.fi/til/tyti/index\\_en](http://tilastokeskus.fi/til/tyti/index_en). The links on the home page lead to, among other things, a description of the statistics, concepts and definitions as well as the free of charge tables from the statistical databases of the Labour Force Survey (StatFin). Data are also available over the Internet from Statistics Finland's chargeable time series database (ASTIKA). Eurostat publishes quarterly and annual Labour Force Survey data on its own website.

The annual publication of Labour Force Statistics contains a review of the past statistical reference year, definitions of key concepts, descriptions of the classifications used, time series and annual tables as well as this Quality description of Labour Force Survey. In addition, Labour Force Survey data are published regularly in the Statistical Yearbook of Finland and in the Bulletin of Statistics. Chargeable special compilations can be requested from the Labour Force Survey information service.

Labour Force Survey data are not released outside Statistics Finland in identifiable form (Statistics Act 280/2004, Personal Data Act 523/1999). Data can be released only on the basis of a separate application for licence to use statistical data and without identifiers for scientific research and statistical surveys. Data adjusted for the EU Labour Force Survey are delivered to Eurostat, the Statistical Office of the European Communities without identifiers. The Labour Force Survey data are protected according to the protection class defined in Statistics Finland's data protection guidelines. A register description can be found (in Finnish) at: [http://www.stat.fi/meta/rekisteriselosteet/rekisteriseloste\\_tyovoimatutkimus.html](http://www.stat.fi/meta/rekisteriselosteet/rekisteriseloste_tyovoimatutkimus.html).

Information service: [tyovoimatutkimus@stat.fi](mailto:tyovoimatutkimus@stat.fi) and tel. +358 29 551 1000.

## 6. Comparability of statistics

A monthly Labour Force Survey, initially called Labour Force Inquiry, has been conducted since 1959. During this time the data content, data collection methods and methodology have been revised on several occasions. A comparable time series of the key data exists since 1989.

Initially, the inquiry with a somewhat limited data content was conducted as a postal survey. In 1976 the data content was expanded and the methodology modernised. During 1977–1993 the survey consisted of a monthly inquiry and supplementary annual interviews conducted over the telephone. The data collection of the monthly inquiry was changed in 1983 from a postal survey to telephone interviews, as a result of which non-response dropped from 30 to 4 per cent.

When Finland joined the European Union the Labour Force Survey was harmonised with the EU Labour Force Survey. At the beginning in 1995–1998, the data for the EU Labour Force Survey were collected as a separate interview survey in March-May. The monthly survey was gradually revised to correspond to the EU Labour Force Survey. The contents of the monthly survey were extended, computer-assisted telephone interviews (CATI) were introduced in the data collection and the concepts and definitions were harmonised to correspond better than before to the EU and ILO guidelines and recommendations. The definition of an unemployed person was revised in May 1998 and the published time series were retrospectively revised to correspond with the new definitions starting from 1989.

In April 1999 the Labour Force Survey's data content was widened again with the combining of the monthly survey and the EU Labour Force Survey into a single, continuous Labour Force Survey. As of the beginning of 2000 the survey changed over into a continuous survey week, whereas previously data for each month had been collected in one survey week. This changeover affected data on working days and hours worked, which are not fully comparable with earlier data starting from the beginning of the year 2000. Starting from 2003 the data content of the survey widened with the so-called household module which is collected from a subsample. A new data collection questionnaire was introduced in 2008. In consequence of this the data content of the survey became slightly revised and collection of some of the data was started from a subsample, whose data are only used as annual data.

## 7. Coherence and consistency/uniformity

In addition to the Labour Force Survey Statistics Finland's statistics related to the labour market include the Job Vacancy Survey, the Quality of Work Life Survey, statistics on labour disputes, statistics on accidents at work as well as register-based employment statistics (RES).

Of these the RES provide data on the labour market activities of the population. The data in them differ from those of the Labour Force Survey due to the data collection method and the definitions of the employed and the unemployed. The RES are based on total data derived from the administrative data of different authorities. The RES data on a person's activities mainly describe the last week of the year. RES data on unemployment are based on the Ministry of Economic Affairs and Employment's register of unemployed job seekers. The statistics take good 18 months to complete; preliminary data are ready within about a year. Since the employment statistics represent total data, they offer better regional data (incl. data by municipality) as well as better data on small population groups, e.g. small industries and occupations, than the Labour Force Survey. The concepts of the employment statistics based on administrative registers are not internationally comparable.

Statistics Finland uses the Labour Force Survey data in the compiling of National Accounts. This is among the reasons why the definitions of the key concepts in the Labour Force Survey, such as population, employment and working hours, follow as closely as possible the recommendations for National Accounts (the UN System of National Accounts, SNA, and the European System of Accounts, ESA). The Labour Force Survey definition of the public sector is somewhat different from the classification of sectors in National Accounts. In National Accounts, conscripts are classified as employed according to ILO recommendations, whereas in the Labour Force Survey conscripts are outside the labour force.

The results from the Finnish Labour Force Survey published by Eurostat, the Statistical Office of the European Communities, differ from those published in Finland in that conscripts are not included in the statistics published by Eurostat. In most EU countries conscripts are not included in the target group of the Labour Force Survey, i.e. population living in private households. This causes differences especially in the results concerning the 15 to 24 age group. In the figures published by Finland persons performing their conscript duty are included in the population outside the labour force. In some cases differences can arise from the fact that Eurostat's figures include the whole population living in private household whereas in Finland the figures only include those between the ages of 15 and 74.

The Ministry of Economic Affairs and Employment also publishes data on unemployed job seekers. The Ministry's data derive from register-based Employment Service Statistics, which describe the last working day of the month. The definition of unemployed applied in the Employment Service Statistics is based on legislation and administrative orders which make the statistical data internationally incomparable. In the Employment Service Statistics an unemployed person is not expected to seek work as actively as in the Labour Force Survey. There are also differences in the acceptance of students as unemployed. More detailed information about differences between the statistics is available:

[http://tilastokeskus.fi/til/tyti/tyti\\_2016-08-23\\_men\\_001\\_en.html](http://tilastokeskus.fi/til/tyti/tyti_2016-08-23_men_001_en.html).

## Inquiries

Pertti Taskinen 029 551 2690

Ulla Hannula 029 551 2924

Director in charge:

Jari Tarkoma

[tyovoimatutkimus@stat.fi](mailto:tyovoimatutkimus@stat.fi)

[www.stat.fi](http://www.stat.fi)

Source: Labour force survey 2018, December. Statistics Finland