

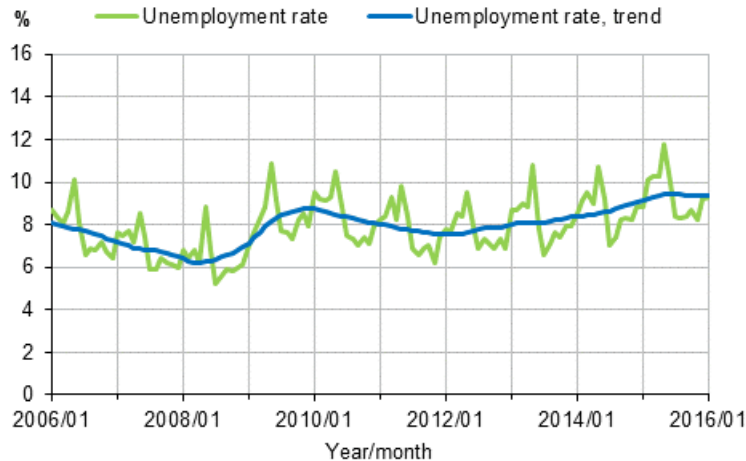
# Labour Force Survey

2016, January

## Unemployment rate 9.3 per cent in January

According to Statistics Finland’s Labour Force Survey, the number of unemployed persons in January 2016 was 245,000, which was 14,000 higher than one year ago. The unemployment rate was 9.3 per cent, having been 8.8 per cent in January of the year before. There were 14,000 fewer employed than in January of the previous year. The number of persons in the inactive population was 9,000 higher than one year earlier.

### Unemployment rate and trend of unemployment rate 2006/01–2016/01, persons aged 15–74



In January 2016, the number of **employed persons** was 2,385,000 (margin of error  $\pm 33,000$ ), which was 14,000 lower than a year earlier. There were 4,000 fewer employed men and 10,000 fewer employed women than in January 2015.

In January 2015, the **employment rate**, that is, the proportion of the employed among persons aged 15 to 64, stood at 66.8 per cent, having been 66.7 per cent one year earlier. The employment rate for men grew by 0.3 percentage points from last year’s January to 66.6 per cent. The employment rate for women fell by 0.3 percentage points to 66.9 per cent. Adjusted for seasonal and random variation, the trend of the employment rate was 68.1 per cent.

According to Statistics Finland's Labour Force Survey, there were 245,000 **unemployed** (margin of error  $\pm 19,000$ ) in January 2016, i.e. 14,000 more than one year earlier. The number of unemployed men was 135,000 and that of women 110,000.

At 9.3 per cent, the **unemployment rate** in January was 0.5 percentage points higher than one year earlier. Men's unemployment rate was 10.0 per cent and women's 8.5 per cent. The trend of the unemployment rate was 9.4 per cent.

In January, there were a total of 640,000 **young people aged 15 to 24**. Of them, 214,000 were employed and 57,000 were unemployed. Thus, the labour force of young people (employed and unemployed) totalled 272,000. In January, the unemployment rate for young people aged 15 to 24, that is, the proportion of the unemployed among the labour force, stood at 21.1 per cent, which was 1.1 percentage points higher than one year previously. The trend of the unemployment rate among young people was 21.5 per cent. The share of unemployed young people aged 15 to 24 among the population in the same age group was 9.0 per cent.

There were 1,481,000 persons in the **inactive population** in January 2016, which was 9,000 more than one year earlier. Of the inactive population, 177,000 persons were in [disguised unemployment](#), which was 32,000 more than in the corresponding period of 2015.

#### Changes in employment 2015/01–2016/01 according to Statistics Finland's Labour Force Survey, population aged 15 to 74

|   | Year/Month   |         | Change            |
|---|--------------|---------|-------------------|
|   | 2015/01      | 2016/01 | 2015/01 - 2016/01 |
|   | 1000 persons |         | Per cent, %       |
| Population total  | 4 101        | 4 110   | 0,2               |
| Active population total   | 2 630        | 2 630   | 0,0               |
| Employed  | 2 399        | 2 385   | -0,6              |
| – employees   | 2 036        | 2 036   | 0,0               |
| – self-employed persons and unpaid family workers   | 363          | 349     | -3,7              |
| Unemployed  | 230          | 245     | 6,2               |
| Inactive population   | 1 471        | 1 481   | 0,6               |
| – persons in disguised unemployment   | 144          | 177     | 22,4              |
|   | Per cent, %  |         | Percentage points |
| Employment rate, persons aged 15 to 64  | 66,7         | 66,8    | 0,0               |
| Unemployment rate   | 8,8          | 9,3     | 0,5               |
| Activity rate   | 64,1         | 64,0    | -0,1              |
| Unrounded figures are used in the Change column.<br>The data comply with the ILO/EU definition. |              |         |                   |

## Employment Service Statistics of the Ministry of Employment and the Economy

At the end of January 2016, there were altogether 368,000 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 9,000 higher than in January 2015.

Unemployment fell in January from the corresponding period in 2015 in the areas of five Employment and Economic Development Centres: most in Kainuu (-5%), North Ostrobothnia (-2%), Häme (-2%) and Lapland (-2%). In the areas of all other Employment and Economic Development Centres, unemployment increased: most in Ostrobothnia (8%), Uusimaa (7%) and Southeast Finland (4%). At the

end of January, the number of temporarily laid off persons registered at the employment and economic development offices was 31,000, which was 3,000 fewer than twelve months earlier.

The number of persons engaged in services included in the activation rate totalled 115,000 at the end of January, which was 7,000 fewer than in January of the previous year. Altogether, 4.4 per cent of the labour force was covered by labour market policy services.

There were 48,000 unemployed job seekers aged under 25 registered at the employment and economic development offices. Their number was almost the same as in last year's January. During this January, 52,000 new vacancies were reported to the employment and economic development offices, which is 1,000 fewer than in January 2014.

### Changes 2015/01–2016/01 according to the Employment Service Statistics of the Ministry of Employment and the Economy

|   | Year/Month   |         | Change            |
|---|--------------|---------|-------------------|
|   | 2015/01      | 2016/01 | 2015/01 - 2016/01 |
|   | 1000 persons |         | Per cent, %       |
| <b>Unemployed job seekers<sup>1)</sup></b>  | 360          | 368     | 2,4               |
| – unemployed over a year  | 102          | 121     | 18,9              |
| <b>Services, total</b>  | 122          | 115     | –5,8              |
| – employed  | 33           | 18      | –44,6             |
| – in labour market training, in training  | 25           | 22      | –10,9             |
| – engaged in work/training trials   | 11           | 13      | 12,1              |
| – as a job alternation substitute, in rehabilitative work, self-motivated studies supported by unemployment benefit | 52           | 61      | 17,3              |
| <b>New vacancies at employment and economic development offices</b>   | 53           | 52      | –1,9              |

Unrounded figures are used in the Change column.

1) The law reform that entered into force at the beginning of 2013 and the change in the lay-off procedure on 1 July increase the number of unemployed job seekers somewhat.

Links: [Law reform 1 January 2013](#)  
[Change in the lay-off procedure 1 July 2013](#)

Contact information for the Ministry of Employment and the Economy:  
 Petri Syvänen tel. +358 29 504 8050, <http://www.temtyollisyyskatsaus.fi>

## 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 Employment and the Economy](#)

[Latest seasonally adjusted employment figures published by the EU](#) can be found on Eurostat's home page <http://ec.europa.eu/eurostat>

[Job vacancies](#)

[Latest data on open job vacancies published by the EU](http://ec.europa.eu/eurostat) can be found on Eurostat's home page  
<http://ec.europa.eu/eurostat>

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# Appendix tables 2016, January

**Appendix table 1. Key indicators in the Labour Force Survey by sex 2015/01 - 2016/01**

|                                       |            | Year/Month  |             | Change            |
|---------------------------------------|------------|-------------|-------------|-------------------|
|                                       |            | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|                                       |            | Per cent, % | Per cent, % | Percentage points |
| Indicator                             | Sex        |             |             |                   |
| Employment rate, persons aged 15–64   | Both sexes | 66,7        | 66,8        | 0,0               |
|                                       | Males      | 66,3        | 66,6        | 0,3               |
|                                       | Females    | 67,2        | 66,9        | -0,3              |
| Unemployment rate, persons aged 15–74 | Both sexes | 8,8         | 9,3         | 0,5               |
|                                       | Males      | 9,9         | 10,0        | 0,1               |
|                                       | Females    | 7,6         | 8,5         | 1,0               |
| Activity rate, persons aged 15–74     | Both sexes | 64,1        | 64,0        | -0,1              |
|                                       | Males      | 65,7        | 65,4        | -0,3              |
|                                       | Females    | 62,6        | 62,6        | 0,0               |

**Appendix table 2. Population aged 15-74 by labour force status and sex 2015/01 - 2016/01**

|            |                         | Year/Month   |              | Change            | Change            |
|------------|-------------------------|--------------|--------------|-------------------|-------------------|
|            |                         | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|            |                         | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Sex        | Labour force status     |              |              |                   |                   |
| Both sexes | Population total        | 4 101        | 4 110        | 10                | 0,2               |
|            | Active population total | 2 630        | 2 630        | 0                 | 0,0               |
|            | - employed              | 2 399        | 2 385        | -14               | -0,6              |
|            | - unemployed            | 230          | 245          | 14                | 6,2               |
|            | Inactive population     | 1 471        | 1 481        | 9                 | 0,6               |
| Males      | Population total        | 2 055        | 2 061        | 6                 | 0,3               |
|            | Active population total | 1 350        | 1 347        | -2                | -0,2              |
|            | - employed              | 1 216        | 1 212        | -4                | -0,3              |
|            | - unemployed            | 133          | 135          | 2                 | 1,3               |
|            | Inactive population     | 706          | 714          | 8                 | 1,1               |
| Females    | Population total        | 2 045        | 2 049        | 4                 | 0,2               |
|            | Active population total | 1 280        | 1 283        | 3                 | 0,2               |
|            | - employed              | 1 183        | 1 173        | -10               | -0,8              |
|            | - unemployed            | 97           | 110          | 13                | 12,9              |
|            | Inactive population     | 765          | 767          | 1                 | 0,2               |

**Appendix table 3. Population by sex and age 2015/01 - 2016/01**

|            |           | Year/Month   |              | Change            | Change            |
|------------|-----------|--------------|--------------|-------------------|-------------------|
|            |           | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|            |           | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Sex        | Age group |              |              |                   |                   |
| Both sexes | 15-74     | 4 101        | 4 110        | 10                | 0,2               |
|            | 15-64     | 3 485        | 3 468        | -17               | -0,5              |
|            | 15-24     | 649          | 640          | -9                | -1,3              |
|            | 25-34     | 695          | 699          | 4                 | 0,6               |
|            | 35-44     | 659          | 664          | 4                 | 0,7               |
|            | 45-54     | 735          | 725          | -10               | -1,4              |
|            | 55-64     | 746          | 740          | -7                | -0,9              |
|            | 65-74     | 616          | 643          | 27                | 4,3               |
| Males      | 15-74     | 2 055        | 2 061        | 6                 | 0,3               |
|            | 15-64     | 1 764        | 1 756        | -8                | -0,4              |
|            | 15-24     | 331          | 327          | -4                | -1,3              |
|            | 25-34     | 357          | 358          | 2                 | 0,5               |
|            | 35-44     | 338          | 339          | 1                 | 0,3               |
|            | 45-54     | 370          | 366          | -4                | -1,1              |
|            | 55-64     | 369          | 366          | -3                | -0,7              |
|            | 65-74     | 291          | 305          | 14                | 4,7               |
| Females    | 15-74     | 2 045        | 2 049        | 4                 | 0,2               |
|            | 15-64     | 1 721        | 1 711        | -9                | -0,5              |
|            | 15-24     | 318          | 313          | -4                | -1,4              |
|            | 25-34     | 339          | 341          | 2                 | 0,6               |
|            | 35-44     | 321          | 325          | 3                 | 1,0               |
|            | 45-54     | 366          | 359          | -6                | -1,7              |
|            | 55-64     | 378          | 374          | -4                | -1,0              |
|            | 65-74     | 325          | 338          | 13                | 4,1               |

**Appendix table 4. Active population by sex and age 2015/01 - 2016/01**

|            |           | Year/Month   |              | Change            |                   |
|------------|-----------|--------------|--------------|-------------------|-------------------|
|            |           | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|            |           | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Sex        | Age group |              |              |                   |                   |
| Both sexes | 15-74     | 2 630        | 2 630        | 0                 | 0,0               |
|            | 15-64     | 2 555        | 2 559        | 4                 | 0,2               |
|            | 15-24     | 278          | 272          | -6                | -2,2              |
|            | 25-34     | 569          | 566          | -3                | -0,5              |
|            | 35-44     | 578          | 592          | 14                | 2,5               |
|            | 45-54     | 660          | 641          | -18               | -2,8              |
|            | 55-64     | 471          | 488          | 17                | 3,6               |
|            | 65-74     | 74           | 71           | -4                | -5,0              |
| Males      | 15-74     | 1 350        | 1 347        | -2                | -0,2              |
|            | 15-64     | 1 302        | 1 305        | 3                 | 0,2               |
|            | 15-24     | 128          | 126          | -1                | -1,1              |
|            | 25-34     | 314          | 310          | -3                | -1,1              |
|            | 35-44     | 306          | 313          | 7                 | 2,2               |
|            | 45-54     | 329          | 327          | -2                | -0,7              |
|            | 55-64     | 225          | 228          | 3                 | 1,4               |
|            | 65-74     | 48           | 43           | -5                | -10,6             |
| Females    | 15-74     | 1 280        | 1 283        | 3                 | 0,2               |
|            | 15-64     | 1 253        | 1 255        | 1                 | 0,1               |
|            | 15-24     | 150          | 146          | -5                | -3,1              |
|            | 25-34     | 255          | 256          | 0                 | 0,2               |
|            | 35-44     | 271          | 279          | 7                 | 2,7               |
|            | 45-54     | 330          | 314          | -16               | -4,8              |
|            | 55-64     | 246          | 260          | 14                | 5,7               |
|            | 65-74     | 27           | 28           | 1                 | 4,8               |



**Appendix table 5. Activity rates by sex and age 2015/01 - 2016/01**

|            |           | Year/Month  |             | Change            |
|------------|-----------|-------------|-------------|-------------------|
|            |           | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|            |           | Per cent, % | Per cent, % | Percentage points |
| Sex        | Age group |             |             |                   |
| Both sexes | 15-74     | 64,1        | 64,0        | -0,1              |
|            | 15-64     | 73,3        | 73,8        | 0,5               |
|            | 15-24     | 42,9        | 42,5        | -0,4              |
|            | 25-34     | 81,9        | 81,0        | -0,9              |
|            | 35-44     | 87,6        | 89,2        | 1,6               |
|            | 45-54     | 89,7        | 88,5        | -1,3              |
|            | 55-64     | 63,1        | 65,9        | 2,9               |
|            | 65-74     | 12,1        | 11,0        | -1,1              |
| Males      | 15-74     | 65,7        | 65,4        | -0,3              |
|            | 15-64     | 73,8        | 74,3        | 0,5               |
|            | 15-24     | 38,6        | 38,7        | 0,1               |
|            | 25-34     | 88,0        | 86,6        | -1,4              |
|            | 35-44     | 90,6        | 92,3        | 1,7               |
|            | 45-54     | 89,1        | 89,4        | 0,3               |
|            | 55-64     | 60,9        | 62,2        | 1,3               |
|            | 65-74     | 16,4        | 14,0        | -2,4              |
| Females    | 15-74     | 62,6        | 62,6        | 0,0               |
|            | 15-64     | 72,8        | 73,3        | 0,5               |
|            | 15-24     | 47,3        | 46,5        | -0,8              |
|            | 25-34     | 75,4        | 75,1        | -0,3              |
|            | 35-44     | 84,4        | 85,9        | 1,5               |
|            | 45-54     | 90,4        | 87,5        | -2,9              |
|            | 55-64     | 65,2        | 69,6        | 4,4               |
|            | 65-74     | 8,3         | 8,3         | 0,1               |

**Appendix table 6. Employed persons by sex and age 2015/01 - 2016/01**

|            |           | Year/Month   |              | Change            |                   |
|------------|-----------|--------------|--------------|-------------------|-------------------|
|            |           | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|            |           | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Sex        | Age group |              |              |                   |                   |
| Both sexes | 15-74     | 2 399        | 2 385        | -14               | -0,6              |
|            | 15-64     | 2 326        | 2 316        | -10               | -0,4              |
|            | 15-24     | 222          | 214          | -8                | -3,6              |
|            | 25-34     | 515          | 506          | -9                | -1,8              |
|            | 35-44     | 536          | 551          | 15                | 2,8               |
|            | 45-54     | 619          | 597          | -22               | -3,6              |
|            | 55-64     | 435          | 448          | 14                | 3,2               |
|            | 65-74     | 73           | 70           | -4                | -5,1              |
| Males      | 15-74     | 1 216        | 1 212        | -4                | -0,3              |
|            | 15-64     | 1 169        | 1 170        | 1                 | 0,1               |
|            | 15-24     | 95           | 93           | -2                | -1,9              |
|            | 25-34     | 279          | 278          | -1                | -0,4              |
|            | 35-44     | 281          | 294          | 13                | 4,7               |
|            | 45-54     | 310          | 301          | -8                | -2,7              |
|            | 55-64     | 205          | 204          | -1                | -0,5              |
|            | 65-74     | 47           | 42           | -5                | -10,6             |
| Females    | 15-74     | 1 183        | 1 173        | -10               | -0,8              |
|            | 15-64     | 1 157        | 1 145        | -11               | -1,0              |
|            | 15-24     | 127          | 121          | -6                | -4,8              |
|            | 25-34     | 236          | 228          | -8                | -3,4              |
|            | 35-44     | 255          | 257          | 2                 | 0,7               |
|            | 45-54     | 309          | 295          | -14               | -4,5              |
|            | 55-64     | 230          | 244          | 15                | 6,4               |
|            | 65-74     | 26           | 28           | 1                 | 4,8               |

**Appendix table 7. Employment rates by sex and age 2015/01 - 2016/01**

|            |           | Year/Month  |             | Change            |
|------------|-----------|-------------|-------------|-------------------|
|            |           | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|            |           | Per cent, % | Per cent, % | Percentage points |
| Sex        | Age group |             |             |                   |
| Both sexes | 15-74     | 58,5        | 58,0        | -0,5              |
|            | 15-64     | 66,7        | 66,8        | 0,0               |
|            | 15-24     | 34,3        | 33,5        | -0,8              |
|            | 25-34     | 74,0        | 72,3        | -1,7              |
|            | 35-44     | 81,2        | 83,0        | 1,7               |
|            | 45-54     | 84,2        | 82,3        | -1,9              |
|            | 55-64     | 58,2        | 60,6        | 2,4               |
|            | 65-74     | 11,9        | 10,9        | -1,1              |
| Males      | 15-74     | 59,2        | 58,8        | -0,4              |
|            | 15-64     | 66,3        | 66,6        | 0,3               |
|            | 15-24     | 28,7        | 28,5        | -0,2              |
|            | 25-34     | 78,2        | 77,5        | -0,7              |
|            | 35-44     | 83,1        | 86,7        | 3,6               |
|            | 45-54     | 83,7        | 82,3        | -1,4              |
|            | 55-64     | 55,5        | 55,7        | 0,1               |
|            | 65-74     | 16,2        | 13,8        | -2,4              |
| Females    | 15-74     | 57,8        | 57,2        | -0,6              |
|            | 15-64     | 67,2        | 66,9        | -0,3              |
|            | 15-24     | 40,1        | 38,7        | -1,4              |
|            | 25-34     | 69,6        | 66,9        | -2,7              |
|            | 35-44     | 79,2        | 79,0        | -0,2              |
|            | 45-54     | 84,6        | 82,2        | -2,4              |
|            | 55-64     | 60,8        | 65,4        | 4,6               |
|            | 65-74     | 8,1         | 8,2         | 0,1               |

**Appendix table 8. Employed persons aged 15-74 by status in employment 2015/01 - 2016/01**

|   | Year/Month   |              | Change            | Change            |
|---|--------------|--------------|-------------------|-------------------|
|   | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|   | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Status in employment                            |              |              |                   |                   |
| Employed persons total                          | 2 399        | 2 385        | -14               | -0,6              |
| Employees total                                 | 2 036        | 2 036        | -1                | 0,0               |
| Self-employed persons and unpaid family workers | 363          | 349          | -14               | -3,7              |

**Appendix table 9. Employed persons aged 15-74 by employer sector 2015/01 - 2016/01**

|   | Year/Month   |              | Change            |                   |
|---|--------------|--------------|-------------------|-------------------|
|   | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|   | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Employer sector                                       |              |              |                   |                   |
| Employer sector total (incl. employer sector unknown) | 2 399        | 2 385        | -14               | -0,6              |
| Private sector  | 1 709        | 1 741        | 31                | 1,8               |
| Public sector   | 682          | 641          | -42               | -6,1              |
| - central government                                  | 143          | 116          | -27               | -18,5             |
| - local government                                    | 540          | 524          | -16               | -2,9              |

**Appendix table 10. Employed persons aged 15-74 by Regional State Administrative Agencies (AVI) 2015/01 - 2016/01**

|  | Year/Month   |              | Change            |                   |
|--|--------------|--------------|-------------------|-------------------|
|  | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|  | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Regional State Administrative Agencies |              |              |                   |                   |
| Whole country (incl. Åland)            | 2 399        | 2 385        | -14               | -0,6              |
| Southern Finland AVI                   | 1 069        | 1 068        | -1                | -0,1              |
| Southwestern Finland AVI               | 300          | 291          | -10               | -3,2              |
| Eastern Finland AVI                    | 221          | 226          | 5                 | 2,4               |
| Western and Inland Finland AVI         | 519          | 515          | -4                | -0,8              |
| Northern Finland AVI                   | 198          | 196          | -2                | -1,1              |
| Lapland AVI                            | 76           | 74           | -2                | -3,1              |

**Appendix table 11. Part-time employed persons aged 15-74 by sex 2015/01 - 2016/01**

|            | Year/Month   |              | Change            |                   |
|------------|--------------|--------------|-------------------|-------------------|
|            | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|            | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Sex        |              |              |                   |                   |
| Both sexes | 379          | 383          | 4                 | 1,0               |
| Males      | 136          | 143          | 7                 | 4,8               |
| Females    | 243          | 240          | -3                | -1,2              |

**Appendix table 12. Proportion of part-time employed persons in all employed persons aged 15-74 by sex 2015/01 - 2016/01, %**

|            | Year/Month  |             | Change            |
|------------|-------------|-------------|-------------------|
|            | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|            | Per cent, % | Per cent, % | Percentage points |
| Sex        |             |             |                   |
| Both sexes | 15,8        | 16,1        | 0,3               |
| Males      | 11,2        | 11,8        | 0,6               |
| Females    | 20,5        | 20,5        | -0,1              |

**Appendix table 13. Employees aged 15-74 by type of employment relationship 2015/01 - 2016/01**

|   | Year/Month   |              | Change            |                   |
|---|--------------|--------------|-------------------|-------------------|
|   | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|   | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Employment relationship                 |              |              |                   |                   |
| Employees total                         | 2 036        | 2 036        | -1                | 0,0               |
| - permanent full-time work              | 1 551        | 1 554        | 3                 | 0,2               |
| - permanent part-time work              | 230          | 230          | -0                | -0,1              |
| - temporary (fixed-term) full-time work | 178          | 179          | 2                 | 1,0               |
| - temporary (fixed-term) part-time work | 78           | 73           | -5                | -6,3              |
| Temporary (fixed-term) work total       | 255          | 252          | -3                | -1,2              |
| Part-time work total                    | 308          | 303          | -5                | -1,7              |

**Appendix table 14. Employees aged 15-74 by type of employment relationship 2015/01 - 2016/01, %**

|   | Year/Month  |             | Change            |
|---|-------------|-------------|-------------------|
|   | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|   | Per cent, % | Per cent, % | Percentage points |
| Employees total                         | 100,0       | 100,0       | 0,0               |
| - permanent full-time work              | 76,2        | 76,3        | 0,2               |
| - permanent part-time work              | 11,3        | 11,3        | 0,0               |
| - temporary (fixed-term) full-time work | 8,7         | 8,8         | 0,1               |
| - temporary (fixed-term) part-time work | 3,8         | 3,6         | -0,2              |
| Temporary (fixed-term) work total       | 12,5        | 12,4        | -0,1              |
| Part-time work total                    | 15,1        | 14,9        | -0,2              |

**Appendix table 15. Unemployed persons by sex and age 2015/01 - 2016/01**

|            |           | Year/Month   |              | Change            |                   |
|------------|-----------|--------------|--------------|-------------------|-------------------|
|            |           | 2015/01      | 2016/01      | 2015/01 - 2016/01 | 2015/01 - 2016/01 |
|            |           | 1000 persons | 1000 persons | 1000 persons      | Per cent, %       |
| Sex        | Age group |              |              |                   |                   |
| Both sexes | 15-74     | 230          | 245          | 14                | 6,2               |
|            | 15-64     | 229          | 244          | 14                | 6,2               |
|            | 15-24     | 56           | 57           | 2                 | 3,3               |
|            | 25-34     | 54           | 60           | 6                 | 11,2              |
|            | 35-44     | 42           | 41           | -1                | -2,2              |
|            | 45-54     | 41           | 45           | 4                 | 9,6               |
|            | 55-64     | 36           | 40           | 3                 | 9,5               |
| Males      | 15-74     | 133          | 135          | 2                 | 1,3               |
|            | 15-64     | 133          | 135          | 2                 | 1,3               |
|            | 15-24     | 33           | 33           | 0                 | 1,0               |
|            | 25-34     | 35           | 33           | -2                | -6,6              |
|            | 35-44     | 25           | 19           | -7                | -25,6             |
|            | 45-54     | 20           | 26           | 6                 | 31,2              |
|            | 55-64     | 20           | 24           | 4                 | 20,8              |
| Females    | 15-74     | 97           | 110          | 13                | 12,9              |
|            | 15-64     | 97           | 109          | 13                | 13,0              |
|            | 15-24     | 23           | 24           | 1                 | 6,5               |
|            | 25-34     | 19           | 28           | 8                 | 43,2              |
|            | 35-44     | 17           | 22           | 6                 | 33,4              |
|            | 45-54     | 21           | 19           | -2                | -10,7             |
|            | 55-64     | 17           | 16           | -1                | -4,0              |

**Appendix table 16. Unemployment rates by sex and age 2015/01 - 2016/01**

|            |           | Year/Month  |             | Change            |
|------------|-----------|-------------|-------------|-------------------|
|            |           | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|            |           | Per cent, % | Per cent, % | Percentage points |
| Sex        | Age group |             |             |                   |
| Both sexes | 15-74     | 8,8         | 9,3         | 0,5               |
|            | 15-64     | 9,0         | 9,5         | 0,5               |
|            | 15-24     | 20,0        | 21,1        | 1,1               |
|            | 25-34     | 9,5         | 10,7        | 1,1               |
|            | 35-44     | 7,3         | 7,0         | -0,3              |
|            | 45-54     | 6,2         | 7,0         | 0,8               |
|            | 55-64     | 7,7         | 8,1         | 0,4               |
| Males      | 15-74     | 9,9         | 10,0        | 0,1               |
|            | 15-64     | 10,2        | 10,3        | 0,1               |
|            | 15-24     | 25,7        | 26,3        | 0,6               |
|            | 25-34     | 11,1        | 10,5        | -0,6              |
|            | 35-44     | 8,3         | 6,1         | -2,3              |
|            | 45-54     | 6,0         | 8,0         | 1,9               |
|            | 55-64     | 8,8         | 10,5        | 1,7               |
| Females    | 15-74     | 7,6         | 8,5         | 1,0               |
|            | 15-64     | 7,7         | 8,7         | 1,0               |
|            | 15-24     | 15,2        | 16,7        | 1,5               |
|            | 25-34     | 7,6         | 10,9        | 3,3               |
|            | 35-44     | 6,2         | 8,0         | 1,8               |
|            | 45-54     | 6,4         | 6,0         | -0,4              |
|            | 55-64     | 6,7         | 6,1         | -0,6              |

**Appendix table 17. Unemployment rates by Regional State Administrative Agencies (AVI) 2015/01 - 2016/01, persons aged 15-74**

|  | Year/Month  |             | Change            |
|--|-------------|-------------|-------------------|
|  | 2015/01     | 2016/01     | 2015/01 - 2016/01 |
|  | Per cent, % | Per cent, % | Percentage points |
| Regional State Administrative Agencies |             |             |                   |
| Whole country (incl. Åland)            | 8,8         | 9,3         | 0,5               |
| Southern Finland AVI                   | 7,6         | 7,7         | 0,1               |
| Southwestern Finland AVI               | 10,0        | 10,1        | 0,1               |
| Eastern Finland AVI                    | 11,5        | 10,8        | -0,7              |
| Western and Inland Finland AVI         | 9,0         | 11,1        | 2,1               |
| Northern Finland AVI                   | 8,8         | 9,4         | 0,6               |
| Lapland AVI                            | .           | .           | .                 |

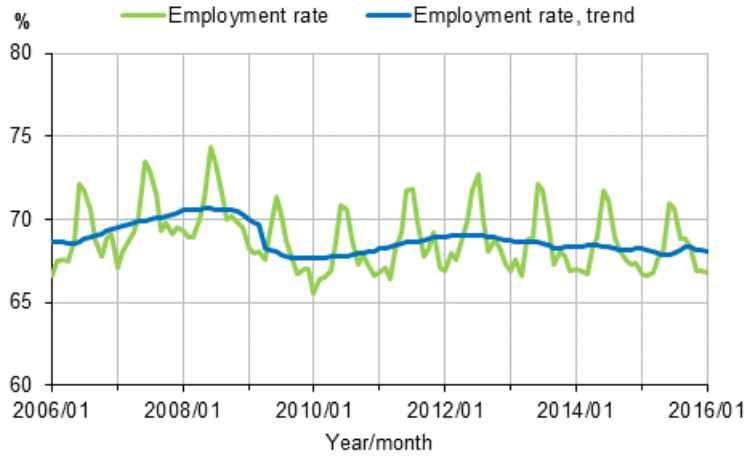
**Appendix table 18. Seasonally adjusted trends 2016/01**

|         | Employed     | Employment rate,<br>persons aged 15–64 | Unemployed   | Unemployed job<br>seekers (MEE) | Unemployment<br>rate, persons aged<br>15–74 | Unemployment rate,<br>persons aged 15–24 |
|---------|--------------|--|--------------|---------------------------------|---|--|
|         | 1000 persons | Per cent, %                            | 1000 persons | 1000 persons                    | Per cent, %                                 | Per cent, %                              |
| 2014/01 | 2 449        | 68,4                                   | 226          | 312                             | 8,4   | 20,0                                     |
| 2014/02 | 2 449        | 68,4                                   | 227          | 314                             | 8,4   | 20,1                                     |
| 2014/03 | 2 450        | 68,4                                   | 227          | 316                             | 8,4   | 20,1                                     |
| 2014/04 | 2 451        | 68,4                                   | 227          | 318                             | 8,5   | 20,0                                     |
| 2014/05 | 2 450        | 68,4                                   | 228          | 322                             | 8,5   | 19,9                                     |
| 2014/06 | 2 449        | 68,4                                   | 228          | 325                             | 8,6   | 19,9                                     |
| 2014/07 | 2 447        | 68,3                                   | 229          | 326                             | 8,6   | 20,0                                     |
| 2014/08 | 2 445        | 68,2                                   | 232          | 328                             | 8,7   | 20,2                                     |
| 2014/09 | 2 443        | 68,2                                   | 237          | 332                             | 8,8   | 20,6                                     |
| 2014/10 | 2 443        | 68,2                                   | 240          | 335                             | 8,9   | 21,0                                     |
| 2014/11 | 2 445        | 68,2                                   | 243          | 338                             | 9,0   | 21,3                                     |
| 2014/12 | 2 447        | 68,3                                   | 244          | 342                             | 9,1   | 21,5                                     |
| 2015/01 | 2 447        | 68,2                                   | 246          | 344                             | 9,1   | 21,7                                     |
| 2015/02 | 2 443        | 68,2                                   | 248          | 346                             | 9,2   | 21,9                                     |
| 2015/03 | 2 438        | 68,1                                   | 250          | 348                             | 9,3   | 22,2                                     |
| 2015/04 | 2 433        | 68,0                                   | 252          | 349                             | 9,4   | 22,3                                     |
| 2015/05 | 2 429        | 67,9                                   | 253          | 351                             | 9,4   | 22,4                                     |
| 2015/06 | 2 428        | 67,9                                   | 254          | 355                             | 9,4   | 22,3                                     |
| 2015/07 | 2 432        | 68,0                                   | 255          | 356                             | 9,4   | 22,2                                     |
| 2015/08 | 2 439        | 68,2                                   | 255          | 355                             | 9,4   | 21,9                                     |
| 2015/09 | 2 443        | 68,3                                   | 254          | 354                             | 9,4   | 21,7                                     |
| 2015/10 | 2 443        | 68,3                                   | 254          | 353                             | 9,4   | 21,6                                     |
| 2015/11 | 2 438        | 68,2                                   | 253          | 354                             | 9,4   | 21,5                                     |
| 2015/12 | 2 434        | 68,1                                   | 253          | 356                             | 9,4   | 21,5                                     |
| 2016/01 | 2 432        | 68,1                                   | 252          | 354                             | 9,4   | 21,5                                     |



# Appendix figures 2016, January

**Appendix figure 1. Employment rate and trend of employment rate 2006/01–2016/01, persons aged 15–64**



**Appendix figure 2. Unemployment rate and trend of unemployment rate 2006/01–2016/01, persons aged 15–74**



**Appendix figure 3. Employment rate and trend of employment rate 1989/01–2016/01, persons aged 15–64**



**Appendix figure 4. Unemployment rate and trend of unemployment rate 1989/01–2016/01, 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\\_2011-11-28\\_men\\_001.html](http://tilastokeskus.fi/til/tyti/tyti_2011-11-28_men_001.html).

Concepts:

- A person is **employed** if he/she has during the survey week been in gainful employment for at least one hour against pay in money or fringe benefits, or to make a profit, or has been temporarily absent from work. Persons absent from work during the survey week are classified as employed if the reason for absence is own illness or maternity or paternity leave or the absence has lasted for under three months. The employed are divided into employees, self-employed or unpaid family workers.
- A person is **unemployed** if he/she is without work during the survey week, 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.

- The **active population (labour force)** comprises all persons who are employed or unemployed during the survey week.
- The **economically inactive population** consists of persons who are not employed or unemployed during the survey week. The economically inactive population can also be referred as persons outside the labour force. 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 2011 (ISCED) 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://www.vrk.fi/default.aspx?id=48>).

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 2014, the household data comprised approximately 52,000 persons who formed 22,000 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 2015, around 103,000 persons were interviewed for the Labour Force Survey. The response rate of this survey was 71 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 Employment and the Economy 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.

In January 2015, the data of a small group of respondents (204 cases) concerning the interviewee's availability for work had to be methodically parsed due to technical problems. This was done by parsing the data based on the same person's earlier data if the person's data for this particular question section had remained completely unchanged in terms of the other questions in the section or, if this was not possible, with a statistical model. Parsing may cause minor measurement error that has been estimated to be around  $\pm 0.2$  per cent in the unemployment rate.

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.tilastokeskus.fi/meta/rekisteriselosteet/rekisteriseloste\\_tyovoimatutkimus.html](http://www.tilastokeskus.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 Employment and the Economy'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 Employment and the Economy 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\\_2015-04-28\\_men\\_001\\_en.html](http://tilastokeskus.fi/til/tyti/tyti_2015-04-28_men_001_en.html).

## Inquiries

Tuomas Remes           029 551 3682  
Pertti Taskinen         029 551 2690  
Director in charge:  
Jari Tarkoma

[tyovoimatutkimus@stat.fi](mailto:tyovoimatutkimus@stat.fi)  
[www.stat.fi](http://www.stat.fi)

Source: Labour force survey 2016, January. Statistics Finland