

## Icelandic Labour Force Survey (IS-LFS)

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### 2. Metadata update

2.3 Metadata last update	23 September 2021
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### 3. Statistical presentation

## 3.1 Data description

The purpose of the Icelandic Labour Force Survey (IS-LFS) is to gather information about people's jobs, hours worked, and job search in line with the [labour market measures](#) used by the statistical office of the European Union (Eurostat). The survey has been carried out since 1991. In the years 1991-2002, data was collected two times per year, in May and November. But, since 2003 data collection has been continuous.

**Sample and response.** The sampling frame for the Icelandic Labour Force Survey (IS-LFS) is drawn from all Icelandic and foreign citizens in the National Registry who are 16-89 years of age and domiciled in Iceland. From the beginning of 2021 the upper boundary for the age of the population of the survey was been moved from 74 to 89 years. As before, results will be published for age group 16-74, but additional results will be published for the older age group.

The data are collected continuously throughout the year. The year is divided into four 13-week periods and the sample consists of around 5,200 individuals each quarter. The sample is divided into five rotating groups (waves), so that in each survey period one group from the sample is being interviewed for the first time, another group for the second time and so forth. When each new survey period starts, the group which has been in the sample five times is replaced by a new group of persons. The new individuals are selected as a simple random sample without any rejections.

In all, participants are partaking in the study three quarters in a row, followed by a two quarters rest before returning to participate for two quarters in a row (a 3-2-2 design). When survey participation is over the respondents are not returned to the sampling frame until two years after having last belonged to a sample. Although individuals can be selected in the sample more than once, results are calculated as a cross-selection research.

**Questionnaire.** Questions in the IS - LFS are based on legal demands as well as various models in comparable questionnaires used in neighboring countries, particularly the Nordic countries. The main focus of the questionnaire is labour participation of people, but it also includes questions about education and people's labour market experience. The questionnaire is designed as to align with Eurostat's [main employment indicators](#), and the data is standardized in accordance with EEA agreements. In January 2021 a new framework regulation establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples, took effect. The regulation influenced harmonised European



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sample surveys conducted at Statistics Iceland, within the Social Statistics. Henceforth, the questionnaire of the Labour Force Survey was adapted to the regulation from January 2021.

**Scheduling.** Those participating in each survey are asked about their employment activity in a given reference week. The reference week starts on a Monday and is the last whole week before the interview takes place.



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## 3.2 Classification system

**Education.** In Statistics Iceland's Labour market survey participants are asked about their highest educational degree. The responses are categorized according to ISCED, the International Education Classification. Primary education corresponds to category 1 and 2, vocational and upper secondary education corresponds to category 3, special education corresponds to category 5 and university education corresponds to categories 6, 7 and 8.

**Residence.** The National Registry provides information on the municipality and address of the respondents. The residence is classified by legal domicile in the National Registry and/or new information on the address of respondents during the survey. Results are consequently published for the two residential areas; the *capital area* and *outside the capital area*.

**Economic activity** is categorized according to Icelandic classification of economic activities, ÍSAT2008.

**Occupations** are classified according to the Icelandic occupational classification, ÍSTARF95.

## 3.3 Sector coverage

## 3.4 Statistical concepts and definition

In Statistics Iceland's Labour force survey, all concepts and definitions are aligned to those of the European statistical office (Eurostat), which are used internationally.

### The main definitions used in the IS-LFS are:

**Population:** Number of people aged 16 to 74 domiciled in Iceland.

**Employment:** Any kind of work in return for money or benefits, unpaid work for own company or family, unpaid work on building own home or production for own consumption. Furthermore, artistic work works even if the person does not have income from it. Unpaid work for housekeeping in one's home has not been considered employment.

**Unemployed:** Individuals who were unemployed in the reference week of the study, i.e. neither had employment nor had been employed (for one hour or more) as an employee or self-employed, are looking for work and can start work within two weeks or have received a job that begins within 3 months. Individuals who are not working but are studying are classified as unemployed if they meet the above criteria. *Students*, including those who seek a study contract in the field of industry, are therefore only considered unemployed if they have searched for work along their studies or future work in the past four weeks and are ready to start work within two weeks from the time the survey was conducted.

**Employed** persons are those who worked one hour or more in the reference week or were temporarily absent from the work which they are usually hired to do.

**Unmet need for employment** is the sum of 1) unemployed; 2) individuals working part-time who want to work more; 3) individuals who are ready to work but not looking for a job; 4) individuals who are not ready to work within two weeks but are looking for a job.

**Labour market slack** is the proportion of those who have unmet need for employment of the labour force and potential labour force.

**Main job** is the job that the respondent considered to be his main job. In cases of doubt the job that the respondent worked more hours at in the reference week is considered the main job.

**Self-employed** are those who work in their own business, for the purpose of earning a profit.

**Labour force** consists of employed and unemployed persons.

**Inactive** Individuals are considered to be inactive if they do not meet the conditions of being employed or unemployed.

**Underemployed** are those who worked less than 35 hours or those working part-time but want to work more.

**Labour force participation** is the proportion of those who are unemployed and employed of the *population* of people aged 16 to 74.

**Unemployment** is the proportion of those who are unemployed of the *labour force*.

**At work in reference week** are those who were present at their job in the reference week.

**Average hours worked/Actual hours worked** is the number of hours that individuals actually worked in the reference week. In the beginning of 2021 the measurement for actual working hours was changed so the time spent on a lunch break and absence due to personal errands are now subtracted from the number of hours worked. The changes were made in correspondence to the framework regulation for social surveys within the European Statistical System.

**Usual working hours** are the average hours a person works in all jobs (main and second job).

**Employed full-time** refers to employment in which a person usually works 35 hours or more.

**Employed part-time** refers to employment in which a person usually works 1 to 34 hours.

<b>3.5 Statistical unit</b>	Individuals
<b>3.6 Statistical population</b>	The population for the Labour market survey consists of all Icelandic and foreign citizens aged 16–89 years who are registered in the National Registry and domiciled in Iceland in the reference week of the study.
<b>3.7 Reference area</b>	Figures are generally published for the country as a whole, for the capital area and the area outside the capital area.
<b>3.8 Time coverage</b>	Continuous results from the Icelandic Labour market survey have been published since 2003. In some cases, figures from 1991 can also be found, but it is not possible to guarantee coherent chronological order until 2003.
<b>3.9 Base period</b>	The calendar month
<b>4. Unit of measure</b>	
<b>4. Unit of measure</b>	The basic unit of the Labour market survey is the individual. In most cases, the results are published as number of individuals (in thousands). Some measurements are displayed as a percentage (for example, unemployment rate) or in other forms (for example, the number of hours worked per week).
<b>5. Reference period</b>	
<b>5. Reference period</b>	<p>Data is collected continuously throughout the year. The year is divided into four 13-week periods.</p> <p>From 2018, the quarterly sample consists of around 5,200 individuals, but between 2003 and 2017, the sample counted about 4,000 people.</p> <p>The sample is divided evenly over all 13 weeks and each participant is asked about their position in the given reference week of the study.</p>
<b>6. Institutional mandate</b>	

<b>6.1 Legal acts and other agreements</b>	Act No 163/2007 on Statistics Iceland and official statistics and (EU) 2019/1700.
<b>7. Confidentiality</b>	
<b>7.1 Confidentiality - policy</b>	See <a href="#">rules on confidentiality</a>
<b>7.2 Confidentiality – data treatment</b>	Act No 163/2007 on Statistics Iceland and official statistics and (EU) 2019/1700.
<b>8. Release policy</b>	
<b>8.1 Release calendar</b>	See <a href="#">rules on statistical releases</a>
<b>8.2 Release calendar access</b>	The <a href="#">Advance release calendar</a> with scheduled releases for the forthcoming calendar year (1 January to 31 December) is published in November each year
<b>8.3 User access</b>	All results from the Labour market survey are accessible through Statistics Iceland’s website under the heading “ <a href="#">Labour Market</a> ”
<b>9. Frequency of dissemination</b>	
<b>9. Frequency of dissemination</b>	Results from the Labour market survey are published monthly, quarterly and yearly.
<b>10. Accessibility and clarity</b>	
<b>10.1 News release</b>	
<b>10.2 Publication</b>	
<b>10.3 On-line database</b>	
<b>10.4 Micro-data access</b>	It is possible to apply for micro-data access through <a href="#">Statistics Iceland research service</a> .





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10.5 Other	
10.6 Documentation on methodology	
10.7 Quality documentation	
<b>11. Quality management</b>	
11.1 Quality assurance	
11.2 Quality assessment	<p>Quality assured and approved methods are used in all our sample studies.</p> <p>The Labour force survey is also used in validation tests of other research within Statistics Iceland, which in turn supports correspondence between the IS-LFS and other data collected and processed by Statistics Iceland.</p> <p>Regular quality reports are submitted to Eurostat. The purpose of these reports is to ensure that the quality of the Icelandic research is in line with the European standard for official statistics.</p>
<b>12. Relevance</b>	
12.1 User needs	Main users are social partners, ministries, institutions, news media and the public.
12.2 User satisfaction	
12.3 Completeness	
<b>13. Accuracy and reliability</b>	
13.1 Overall accuracy	

## 13.2 Sampling errors

The Labour force survey is a sample based survey. Every sample survey entails a degree of uncertainty because of the sample not being an exact reflection of the entire registry or population. Therefore, the results are subject to greater uncertainty as the breakdown of the statistics increases as it commonly means that there are fewer answers for each breakdown. From the beginning of the continuous Labour force survey in Iceland and until 2021, answers were weighted by post-stratification weights where the sample was adjusted to the population by weighing response by gender and age. The response rate of the Labour force survey has decreased over the last few years, so in the beginning of 2021 a new method for weighing responses was adopted. The new weight is built on response probabilities based on immigration background, gender, educational status, age and labour market status based on register data. Using response probability weights reduces the non-response error which can come with reduced response rates. The new weight was calculated back to 2003 and all figures re-calculated with the new weight and the whole time-series republished.

It should be pointed out that figures for certain groups are based on a significant breakdown of the responses. This means that there is a noteworthy uncertainty in the counts where the breakdown is great (such as for certain age groups). Hence, these numbers may greatly change between years depending on the numbers of individuals and how much they weigh in the data processing.

## 13.3 Non-sampling errors

*The main errors other than sampling errors in the IS-LFS are coverage errors and non-response errors.*

**Coverage errors.** Coverage errors, on one hand, stem from the fact that the registry that is the basis for the selection of the sample (the sampling frame) is not exhaustive and, on the other hand, because in the frame there are individuals or entities that do not belong there. This is called on the one hand *under-coverage* and on the other hand *over-coverage*.

For example, the IS-LFS sample sometimes includes individuals who are based abroad for study or work for more than 6 months in a given year, thus falling outside the study's population. If this group is not deducted from the population of working age the assessment of the total size will be overestimated. This kind of error is called *over-coverage*.

It is much harder to detect *under-coverage*, i.e. people who should be included in the population but are not. This group may contain Icelandic citizens registered abroad but are actually resident in Iceland and people from the European Economic Area who live and work in Iceland without being registered here as legally domiciled.

**Non-response errors:** In all surveys, results may be skewed due to the fact that *non-response* in the sample varies by group. The main reasons for non-response are refusals, barriers to illness or disability, absence from home during a survey or failure to find the address or telephone number of those in the sample.

Since 2003, the response rate in the IS-LFS has fallen from about 80% to about 65%, mostly because participants could not be reached by telephone. In order to reduce the impact of non-response bias a new response probability weight was adopted in January 2021 in order to correct for non-response bias.

**Imputation.** Participant's working time is imputed if the information is missing. If respondent is unable to provide detailed working hours, they are asked to select the number of hours in a given range and this value is used for imputation. If the respondent answers neither question about working hours a regression analysis is used for the imputation.

## 14. Timeliness and punctuality

<b>14.1 Timeliness</b>	Monthly results from the Labour force survey are available 3 weeks after the end of the last reference week in a month. Quarterly and annual results are available 4 weeks after the last reference week of the year / quarter ends.
<b>14.2 Punctuality</b>	The results of the Labour force survey are usually published on previously advertised dates. It is very rare for publications to be delayed.

## 15. Coherence and comparability

<b>15.1 Comparability – geographical</b>	The Labour force survey provides, among other things, figures for Eurostat's international data collection, which is intended to gather information on international labour supply and short-term labour market organisation. Emphasis is placed on coordinated data collection and processing between European countries where the aim is to ensure the comparability of results across the countries participating in the European statistical system.
<b>15.2 Comparability – over time</b>	From 1991 to 2002, Statistics Iceland's Labour force survey was carried out twice a year, but since 2003 it has been continuous throughout the year. Since 1991, a number of changes have taken place in the questionnaire. The questionnaire and the conduct of the study were revised before the continuous study began in 2003. The questionnaire was revised in full at the end of 2020 when the framework social statistics legislation came into effect within the European Statistical System.
<b>15.3 Coherence – cross domain</b>	Various information on the number of employed, development and size of industries can be found in other publications of Statistics Iceland. Statistics Iceland also publishes figures on the total number of employed persons, by sex, background and economic activities from administrative registries, monthly figures on the number of employees by months and years derived from tax data and annual operating and balance sheets of enterprises by industry, based on their tax returns which gives an overview of the status and development of individual industries.
<b>15.4 Coherence – internal</b>	

16. Cost and burden	
16. Cost and burden	Participants in the sample are free to refuse to participate in the study. The average interview time is about 6 minutes, - shorter if participants have previously been in the study but longer if they are new to the study.
17. Data revision	
17.1 Data revision - policy	See Statistics Iceland <a href="#">revision policy</a> .
17.2 Data revision -practice	The whole time-serie for seasonally adjusted figures and seasonally adjusted trends is updated monthly.
18. Statistical processing	
18.1 Source data	This is a sample study of individuals based on their answers in telephone surveys. The main purpose of the survey is to assess the size of the workforce and those outside the labor market and their experience of the labor market.
18.2 Frequency of data collection	Weekly
18.3 Data collection	<p>Data is collected via computer assisted telephone interviews (CATI) and collected using the BLAISE data collection program. This program saves time, helps the interviewers choose the right order of questions and reduces errors.</p> <p>Most phone calls take place in the evenings and during weekends, but there are also efforts to phone participants during the daytime if information from other household members indicates they are most likely to be reached then. Thoroughgoing attempts are made to reach those who have moved or do not have a registered telephone number, though no trips are undertaken to the participants' homes.</p> <p>After 1991, interviewers have been hired to phone the participants. Before each survey begins, the interviewers are instructed in interview techniques, reviewing the list of questions, and computer system and explaining unclear issues.</p>

<b>18.4 Data validation</b>	Validation is done during data collection during which responses must adhere to certain internal conformity rules for each respondent. In data processing, other rules are used to check the data set and its consistency across different variables and measures.
<b>18.5 Data compilation</b>	<p>All results are weighed according to response probability based on origin, gender, educational status, age and labour market status based on register data, and then seasonally adjusted. Weighted figures are published for the measurement itself along with seasonally adjusted figures and the trend.</p> <p>Since the third quarter of 2019 all data compilation and processing of monthly figures has been done using the statistical program R. Variables are coded based on Eurostat's recommendation for the <a href="#">operational definition of the main indicators of employment</a>.</p>
<b>18.6 Adjustment</b>	Estimated population in Statistics Iceland's Labour force survey is based on counts from monthly national register figures based on gender and age, minus the estimated number of people who are not living in Iceland each month.
<b>19. Comment</b>	
<b>19. Comment</b>	