In February, Statistics Iceland published new preliminary figures on the number of jobs, the number of employed persons, and the number of hours worked on a national accounts basis. The data include both employed and self-employed persons and cover individual sectors and the labour market as a whole. Concurrently, Statistics Iceland published new figures on labour productivity, based on this information. These figures are a welcome supplement to the Statistics Iceland labour force survey (LFS) and will, with time, lead to improved assessments of developments in the labour market. These figures will hereafter be part of regular national accounts publications, with the first publication covering the period from 2008 through 2017. Figures covering as far back as data continuity allows will be published as soon as possible.

The new figures are obtained by using data from the Statistics Iceland Survey on Wages, Earnings and Labour Costs (LS) together with the LFS in order to estimate relative variables. These are then used to estimate activity for the labour market as a whole, using pay-as-you-earn (PAYE) data, personal income tax returns, and individuals' wage slips, as well as the educational database, registered days at sea, and corporate income tax returns.

## Comparison with labour force survey findings

Comparing the new annual figures with the LFS shows a difference in levels, while changes between periods are similar. The Central Bank has used the number of employed persons from the LFS, but information on the number of persons at work from the same survey should be most comparable to the number of employed persons according to the national accounts. It is therefore surprising how large a difference there is in the number of persons at work according to the LFS and the number of employed persons according to the national accounts measure. That said, developments in the two are relatively similar, even though the latter measure shows a larger contraction in 2009 than the former (Chart 1).

Average hours worked per week are not presented on a national accounts basis but can be calculated from the number of employed persons and the number of hours worked per year. Doing this reveals a significant difference between the LFS and the national accounts measures (Chart 2). For example, employed individuals worked just under 28 hours per week in 2017 according to the national accounts, whereas the average work week for those at work according to the LFS was just under 40 hours long. It is also somewhat surprising that the average work week of all persons according to the national accounts is shorter than the average work week of the youngest age group in the LFS, most of whom are employed part-time.3 The difference probably stems mostly from the fact that LS figures are used in the estimation and also because the time span of the measures differs;4 furthermore, the number of hours worked could be overestimated in questionnaire-based surveys such as the LFS, where responses are based on survey par-

## Box 2

## New statistics on labour volume and productivity

Chart 1 Various measures of employment 2008-2017

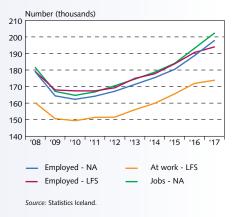


Chart 2 Various measures of average hours worked 2008-2017

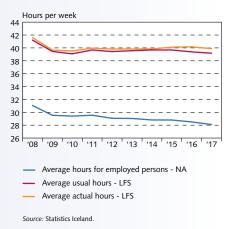
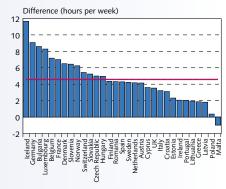


Chart 3
Difference between average hours worked according to LFS and national accounts, 2016<sup>1</sup>



Red line shows the average difference across the country group Figures for Norway are from 2015.
 Sources: Eurostat, Statistics Iceland, Central Bank of Iceland.

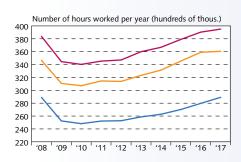
The difference between these estimates is to be expected, both because they are produced differently and because of conceptual differences.

<sup>2.</sup> According to the LFS, employed persons are those who worked at least 1 hour during the reference week or were absent from work they usually carry out. The LFS then defines those who were at work as employed individuals, but excluding those who were absent during the reference week in the survey. The number of employed persons according to the national accounts, however, is the number of individuals by main occupation, provided that the activities fall within the sphere of the national accounts.

The youngest age group is those aged 16-24, whose average work week in 2017 was 31 hours, according to the LFS.

The national accounts include those who have worked in each month, while the LFS is based on a reference week.

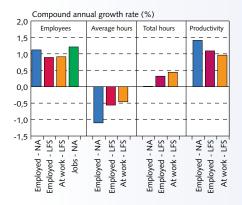
Chart 4 Various measures of total hours worked 2008-2017



Total hours worked, employed persons - NA
 Total hours worked, employed persons - LFS
 Total hours worked, persons at work - LFS

Source: Statistics Iceland.

Chart 5 Various measures of labour volume and productivity 2008-2017<sup>1</sup>



1. Productivity measured as gross factor income (volume index) per total hours worked.

Sources: Statistics Iceland, Central Bank of Iceland.

ticipants' memory and experiences and respondents may include contractually agreed breaks (such as meal breaks) as work time. Furthermore, cultural factors could cause respondents to overestimate in regions where working long hours is viewed favourably.<sup>5</sup> In other European countries, it is common that the number of hours worked according to labour force surveys exceeds the number according to national accounts. In 2016, the work week was, on average, 4½ hours longer in the countries for which the European statistics bureau, Eurostat, publishes figures. The difference was greatest in Iceland, as the work week was nearly 12 hours longer (Chart 3). In terms of developments in the average work week over the period, national accounts figures also show a larger contraction in hours worked over nearly the entire period.

Because of a shorter work week according to the national accounts, total hours worked are much fewer than in the LFS, even though the number of employed persons in the national accounts is greater than in the LFS series showing the number of persons at work. According to the national accounts figures, it appears that the reduction in total hours worked was greater during the recession and that total hours increased more slowly during that period than in the LFS. They also indicate that total hours worked reached 2008 levels in 2017, whereas the LFS indicate that they were reached a year earlier. A slower increase in total hours worked entails a more rapid increase in labour productivity during the period according to the national accounts figures on labour volume (Chart 5), mostly due to a larger contraction in total hours in 2009.

See, for example, T. Körner and L. Wolff (2016), "Do the Germans really work six weeks more than the French? – Measuring working time with the Labour Force Survey in France and Germany", Journal of Official Statistics, 32, pp. 405-431.