

# The renewed Labour Force Survey (LFS) in 2021

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## The renewed Labour Force Survey (LFS) in 2021

*Why was the LFS renewed?*

*What changes were made?*

*What are the consequences of these innovations on employment, unemployment and working time?*

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## ABSTRACT

This analysis takes a more in-depth look at the changes to the Labour Force Survey (LFS) questionnaire made by Statbel in 2021. The changes to the questionnaire are the result of a new European framework regulation ([Regulation \(EU\) 2019/1700](#)) that applies to the data collection of different surveys in the field of social statistics. This framework regulation provides for a revision of the list of variables for the Labour Force Survey and a more uniform way of measuring some essential concepts, such as the labour market status or working time. All this is aimed at increasing comparability among EU Member States.

The changes compared to the old questionnaire are diverse. A number of variables were deleted because they have become less relevant or because the information is available in administrative sources. Other new questions were added. Sometimes, the order of questions or the frequency of interviews (annual versus quarterly) was changed. In a number of cases, the wording of existing questions was also changed or the possible answers were modified.

An essential part of the new questionnaire is the measurement of the labour market status (employed, unemployed, inactive). The new framework regulation brings this measurement into line with the adjusted operational definitions of employment and unemployment of the International Labour Office (ILO). In addition, Eurostat, the statistical office of the European Union, is striving for more input harmonisation through the legal imposition of flow charts. These should ensure that the various EU Member States interpret and measure the essential concepts determining the labour market status in the exact same way.

A second important part of the questionnaire is the block designed to measure the working time. Here, too, important changes have been made, again with the aim to ensure a more uniform measurement among the various EU Member States and thus to achieve results that are more comparable at European level.

As it was expected that the implementation of these new definitions and measurement would lead to breaks in the series of some key LFS indicators, Statbel decided to organise a pilot survey in 2020 to gain insight into the extent of these breaks. This pilot survey focused on the module measuring the labour market status and the module measuring the absences and working time. Furthermore, the pilot survey was crucial for testing the updated tools and work processes and introducing them to the interviewers.

Statbel did a backcasting exercise required by Eurostat for a number of series of policy-relevant indicators. Those break-free series from 2009 onwards were delivered to Eurostat and were published on the Eurostat website, along with earlier series (historical series). However, Statbel decided, given the limited difference, not to revise the series on our website, but to provide explanation on the effect of certain changes.

As a result of the modified LFS questionnaire, there is a break in the 2021 results for all indicators. The new employment and unemployment definitions have a negative impact on the number of employed people and cause a slight increase in the number of unemployed people. The new measurement of absences and working time reduce the average effective working time per week by one and a half to two hours.

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## 1 Introduction

The Labour Force Survey (LFS) is a household survey that measures the number of employed, unemployed and inactive people according to internationally comparable definitions, as well as the characteristics of these groups. This survey is also carried out in the other EU Member States and is coordinated by Eurostat, the statistical office of the European Union. In Belgium, Statbel is responsible for implementing and processing the LFS and for disseminating the results.

The Belgian LFS has been conducted since 1983 and has undergone several minor and major changes over the years. A first major methodological change occurred in 1999 when a switch was made from a survey related to one reference week in the spring to a continuous survey. The transition to a continuous survey means that the sample is evenly spread over all weeks of the year. This continuous survey was imposed on European Union statistical institutes by Council Regulation (EC) No 577/98 of 9 March 1998 on the organisation of a labour force sample survey in the Community.

The content and the methodology of the Belgian Labour Force Survey remained quite stable between 1999 and 2016. However, there were minor changes to the questionnaire, we went from a PAPI (Pen-and-Paper Personal Interview) to a CAPI (Computer Assisted Personal Interviewing) data collection and some nomenclatures (such as NACE, ISCO and ISCED nomenclatures<sup>1</sup>) were revised.

A second major methodological reform was implemented in 2017. We then switched to an infra-annual rotating panel, a mixed mode data collection was introduced and the weighting method was revised<sup>2</sup>. There were various reasons for this reform, including the anticipation of the thorough reform and modernisation of social statistics that was being worked on at European level. Indeed, since 2010, a new framework regulation on Integrated European Social Statistics (IESS) was being prepared, to come into force in 2021. One of the obligations in that new framework regulation would be an infra-annual panel design for LFS. By switching early from a cross-sectional design, where each respondent is surveyed only once, to a panel design, where each respondent is surveyed at several points in time, new user needs (labour market transitions) could be addressed at the same time. In addition, the quality of the survey could be improved (less large fluctuations) and, partly thanks to the switch to a mixed mode data collection, budgetary room was freed up to significantly increase the sample on a quarterly basis.

A next step in the implementation of the new European framework regulation ([EU regulation 2019/1700](#)) that entered into force in 2021 was the renewing of the questionnaire. Indeed, this framework regulation provides for a complete revision of the list of variables for the Labour Force Survey and a more uniform way of measuring some essential concepts, such as the labour market status or the working time, which aims to increase comparability at European level. Besides revising the questionnaire content, the tools for data collection and fieldwork management were also revised.

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<sup>1</sup> NACE= the Statistical classification of economic activities in the European Community. ISCO= The International Standard Classification of Occupations. ISCED= International Standard Classification of Education.

<sup>2</sup> See Anja Termote and Astrid Depickere, The reformed Labour Force Survey, [https://statbel.fgov.be/sites/default/files/Over\\_Statbel\\_FR/Analyse\\_eak\\_2017\\_nl\\_20181220.pdf](https://statbel.fgov.be/sites/default/files/Over_Statbel_FR/Analyse_eak_2017_nl_20181220.pdf)

One of the key elements of the questionnaire revision is the implementation of the new operational definition of employment and unemployment, as laid down in the 19<sup>th</sup> ICLS<sup>3</sup> resolution, on the one hand, and the improvement of the measurement of working hours, on the other. As it was expected that the implementation of these new definitions and measurement would lead to breaks in the series of some key LFS indicators, Statbel decided to organise a pilot survey to gain insight into the extent of these breaks. This pilot survey focused on the module measuring the labour market status (employed, unemployed, inactive) and the module measuring absences and working time. The pilot survey was also intended to serve as a basis for calculating backcasting factors for a series of policy-relevant indicators. Those factors had to be delivered to Eurostat in order to publish break-free series from 2009. Furthermore, the pilot survey was considered crucial for testing the revised tools and work processes and introducing them to the interviewers.

This analysis will first describe the practical process of implementing the pilot survey and developing the new data collection tools. The impact of the COVID pandemic outbreak on the original plans will also be discussed. In a second section, we will elaborate on the changes made. In a third section, we try to estimate the impact of the new measurement on employment and unemployment on the one hand and on working hours on the other.

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<sup>3</sup> ICLS= International Conference of Labour Statisticians

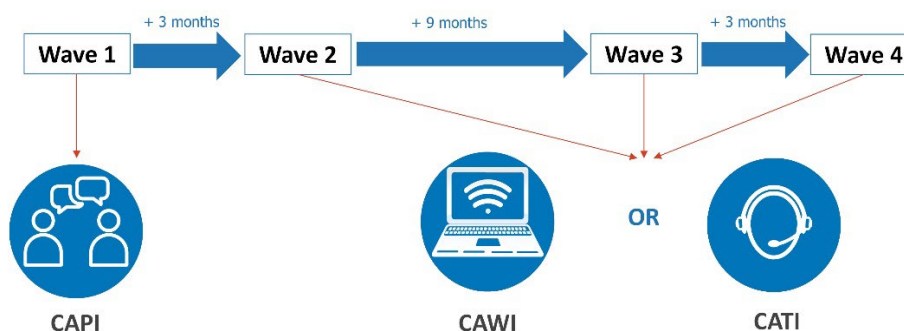
## 2 Development of the new questionnaire and pilot survey

### 2.1 Practical implementation and questionnaire development

Until 2016, the Belgian Labour Force Survey was a cross-sectional survey in which each respondent was surveyed only once through a face-to-face interview (CAPI)<sup>4</sup>. Exceptionally, namely when the household consisted only of persons aged 65 and over, none of whom was working anymore, a telephone survey (CATI) was also allowed. The same tools were used as for the CAPI survey.

In 2017, the Belgian LFS became a panel survey with a 2(2)2 design in which respondents are surveyed for two consecutive quarters, then not surveyed for two quarters and then surveyed again for two quarters. For data collection, a mixed mode data collection was introduced where respondents are surveyed face-to-face via CAPI in the first wave (= initial survey) and via internet (CAWI) or telephone (CATI) in subsequent waves. This is presented schematically below

**Chart 1: Mixed mode data collection in a panel design 2(2)2**



In summer 2019, preparations started for the development of the new questionnaire and survey tools. Until 2020, the questionnaires were programmed in Blaise 4 software. For the new questionnaires, a switch was made to Blaise 5 software, which is better suited for programming a mixed mode data collection.

In practice, there is quite a big difference between the CAPI questionnaire used for the first wave (= first survey) and the CAWI/CATI questionnaire used for the follow-up surveys. This is mainly due to the fact that a number of questions are only addressed in the first survey (=application of the wave approach<sup>5</sup>) and to the combination with dependent interviewing whereby information from previous interviews is used and whereby the wording and routing of the questions are adapted to that already available information.

An additional complexity is that the questionnaire has to be available in 4 languages: the 3 national languages (French, Dutch and German) and English. Moreover, the wording of the questions is adjusted when someone else answers instead of the respondent (= proxy). All this makes the process of questionnaire development and testing quite heavy.

<sup>4</sup> CAPI= Computer Assisted Personal Interviewing, CATI= Computer Assisted Telephone Interviewing, CAWI=Computer Assisted Web Interviewing.

<sup>5</sup> Here, a distinction is made between core (or quarterly) variables and structural (or annual) variables. Whereas core variables are collected at each interview, structural variables are only asked during the first interview.

## 2.2 Pilot survey

In 2019, Statbel prepared a pilot survey to be conducted in 2020. The objectives of the pilot survey were the following:

- extensive technical testing of the new fieldwork tools;
- testing of the new questions to see if they are interpreted correctly by interviewers and respondents;
- understanding the extent of breaks, especially those resulting from the changed operational definitions of unemployment and employment and the new measurement of working hours;
- to serve as a basis for the calculation of backcasting factors for a number of indicators for which Eurostat intends to publish break-free series from 2009.

Especially for the last two objectives, it was necessary to have a sufficiently large sample. Statbel decided to conduct the pilot survey in the 4 quarters of 2020 with a sample that was independent of the regular sample. Respondents would be surveyed over 2 waves so that both the CAPI and CATI/CAWI tools could be tested. As far as possible, the pilot survey was conducted in the same conditions as the regular survey in order to obtain comparable results. Therefore, the sample was also drawn according to the same methodology and within the same primary PSUs<sup>6</sup> as the regular survey and the same calibration method was applied (see below).

The sample size of these “test rotation groups<sup>7</sup>” was about 1/4<sup>th</sup> of the size of a rotation group in the regular survey (Table 1).

**Table 1: estimated net sample size (number of households) per quarter - 2020**

|                     | Wave 1 | Wave 2 | Wave 3 | Wave 4 |
|---------------------|--------|--------|--------|--------|
| <b>Regular LFS</b>  | 4,700  | 4,012  | 3,611  | 3,250  |
| <b>Pilot survey</b> | 1,200  | 1,000  | -      | -      |

As we mainly wanted to use the pilot survey to evaluate the impact of the new operational definitions of unemployment and employment on the one hand and the new measurement of working hours on the other, the focus of the pilot survey was on these 2 modules. When launching the pilot survey in early 2020, we started with a limited questionnaire that mainly contained the household questions and the questions to derive the labour market status and working time. In this way, the workload for developing and testing the new tools could be spread. New modules were gradually added and by the fourth quarter of 2020, the full CAPI questionnaire could be tested on the field. The entire CAWI/CATI questionnaire was also fully ready by the end of 2020.

<sup>6</sup> Primary Sampling Unit (PSU). These are the so-called districts or statistical sections.

<sup>7</sup> The new sample that starts each quarter with an initial interview is called a rotation group.



The pilot survey started in early 2020 by interviewing respondents face-to-face in wave 1, just like the regular survey. But with the COVID-19 outbreak, Belgium went into lockdown in mid-March and no interviews could continue face to face. This applied to both the pilot survey and the regular survey. When the interviewers could find the phone number of the households to be surveyed (e.g. online or by putting a note in the mailbox asking them to contact them by phone), they were allowed to do the interviews by phone. This allowed the fieldwork to continue but response rates nevertheless dropped significantly. As before the COVID-19 crisis, follow-up interviews could continue in a normal way via telephone (CATI) or the internet (CAWI). For the pilot survey, the first follow-up survey continued in the second quarter of 2020, it was the second interview of households who started the pilot survey in the first quarter. Thus, there was no CATI/CAWI survey in the first quarter.

Table 2 shows the response rates during the 4 quarters of 2020 and this for both the pilot survey and the regular survey. The top half of the table contains the figures expressed in terms of number of households, while the bottom table provides information on the number of individual respondents who participated in the survey. Because the survey is done at household level, the response rate is usually expressed as the percentage of participating households relative to the total number of selected households in the sample (or, in the case of a follow-up wave, relative to the number of households that participated in the previous wave).

While the response rate to the first wave of the regular survey averaged 72% in the 2017-2019 period, it dropped to an average of 64% across the 4 quarters in 2020. This drop occurred in both the pilot survey and the regular survey, but especially towards the end of the year, the response rate dropped a few more points in the pilot survey, while that was not the case in the regular survey. When we then look at the response rate on the first follow-up wave (i.e. wave 2), the response rate within the regular survey appears to be similar to the figures in previous years and even slightly higher. In the pilot survey, however, we see noticeably lower response rates on the follow-up wave.

These lower response rates meant that, for the pilot survey, we did not achieve the targeted sample numbers and obtained a sample that was about 15% lower, which had a negative effect on the precision of the estimates and increased the likelihood of random sampling fluctuations.

**Table 2: Response rates at the level of households and individuals (pilot survey versus regular survey) – first 4 quarters of 2020.**

| Number of responding households  |              |               |              |               |                |               |               |               |
|----------------------------------|--------------|---------------|--------------|---------------|----------------|---------------|---------------|---------------|
|                                  | Pilot survey |               |              |               | Regular survey |               |               |               |
|                                  | wave 1       | response rate | wave 2       | response rate | wave 1         | response rate | wave 2        | response rate |
| <b>2020Q1</b>                    | 1,056        | 65%           |              |               | 4,445          | 66%           |               |               |
| <b>2020Q2</b>                    | 1,037        | 64%           | 864          | 82%           | 4,308          | 64%           | 3,902         | 88%           |
| <b>2020Q3</b>                    | 1,019        | 63%           | 878          | 85%           | 4,140          | 62%           | 3,820         | 89%           |
| <b>2020Q4</b>                    | 972          | 60%           | 855          | 84%           | 4,230          | 63%           | 3,727         | 90%           |
| <b>Total</b>                     | <b>4,084</b> |               | <b>2,597</b> |               | <b>17,123</b>  |               | <b>11,449</b> |               |
|                                  |              |               |              |               |                |               |               |               |
| Number of responding individuals |              |               |              |               |                |               |               |               |
|                                  | Pilot survey |               |              |               | Regular survey |               |               |               |
|                                  | wave 1       | response rate | wave 2       | response rate | wave 1         | response rate | wave 2        | response rate |
| <b>2020Q1</b>                    | 2,432        | 64%           |              |               | 10,671         | 65%           |               |               |
| <b>2020Q2</b>                    | 2,383        | 63%           | 2,010        | 81%           | 9,966          | 63%           | 9,293         | 86%           |
| <b>2020Q3</b>                    | 2,373        | 62%           | 2,061        | 86%           | 9,686          | 60%           | 8,709         | 87%           |
| <b>2020Q4</b>                    | 2,239        | 59%           | 2,012        | 84%           | 9,796          | 63%           | 8,701         | 89%           |
| <b>Total</b>                     | <b>9,427</b> |               | <b>6,083</b> |               | <b>40,119</b>  |               | <b>26,703</b> |               |

To compare the results based on the pilot survey with those from the regular survey, the same calibration method was applied to both the pilot survey data and a sub-sample of the regular survey, which was limited to the same 2 waves as in the pilot survey.<sup>8</sup> This again with the intention of achieving as many comparable samples as possible when analysing the results (see below).

<sup>8</sup> Information about the calibration method is available in Anja Termote and Astrid Depickere, The reformed Labour Force Survey in 2017, [https://statbel.fgov.be/sites/default/files/Over\\_Statbel\\_FR/Analyse\\_eak\\_2017\\_nl\\_20181220.pdf](https://statbel.fgov.be/sites/default/files/Over_Statbel_FR/Analyse_eak_2017_nl_20181220.pdf)

## 2.3 Transition from the old to the new questionnaire for the regular survey

At the end of the fourth quarter of 2020, the pilot survey ended and the new questionnaire and tools were integrated into the regular survey. This is shown in Chart 2. For respondents who participated in the regular survey in the fourth quarter of 2019 or in 2020, this meant that they had to switch to the new CAWI/CATI questionnaire for one or more follow-up interviews. Since the CAWI/CATI applications use pre-completed information from the previous waves, some specific solutions had to be developed to enable the transition from the old questionnaire to the new questionnaire, both for the rotation groups that switched from the old CAPI to the new CAWI/CATI (the rotation groups in the 2<sup>nd</sup> wave in 2021) or from the old CAWI/CATI to the new CAWI/CATI (the rotation groups in the 3<sup>rd</sup> or 4<sup>th</sup> wave in 2021).

**Chart 2: schematic representation of the rotation groups of the regular and pilot surveys in 2020 and 2021**

| Rotation group | 2020Q1   | 2020Q2   | 2020Q3   | 2020Q4   | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 |
|----------------|----------|----------|----------|----------|--------|--------|--------|--------|
| RG14           | w4       |          |          |          |        |        |        |        |
| RG15           | w3       | w4       |          |          |        |        |        |        |
| RG16           | -        | w3       | w4       |          |        |        |        |        |
| RG17           | -        | -        | w3       | w4       |        |        |        |        |
| RG18           | w2       | -        | -        | w3       | w4 new |        |        |        |
| RG19           | w1       | w2       | -        | -        | w3 new | w4 new |        |        |
| RG20           |          | w1       | w2       | -        | -      | w3 new | w4 new |        |
| RG21           |          |          | w1       | w2       | -      | -      | w3 new | w4 new |
| RG22           |          |          |          | w1       | w2 new | -      | -      | w3 new |
| RG23           |          |          |          |          | w1 new | w2 new | -      | -      |
| RG24           |          |          |          |          |        | w1 new | w2     | -      |
| RG19 pilot     | w1 pilot | w2 pilot | STOP     | -        |        |        |        |        |
| RG20 pilot     |          | w1 pilot | w2 pilot | STOP     |        |        |        |        |
| RG21 pilot     |          |          | w1 pilot | w2 pilot | STOP   |        |        |        |
| RG22 pilot     |          |          |          | w1 pilot | STOP   |        |        |        |

## 3 New questionnaire 2021: changes made

### 3.1 In general

As mentioned above, the changes to the LFS questionnaire are the result of a new European framework regulation ([Regulation \(EU\) 2019/1700](#)) that applies to the data collection of different surveys in the field of social statistics. This framework regulation provides for a revision of the list of variables for the Labour Force Survey and a more uniform way of measuring some essential concepts, such as the labour market status or working time. The aim is to increase comparability at European level.

The changes compared to the old questionnaire are diverse. Thus, some variables were deleted because they have become less relevant (e.g. duration in number of hours of education attended), because the information is available in administrative sources (e.g. salary) or because they can be calculated through the panel (e.g. socio-economic status one year ago). Other, new questions, were added (e.g. questions on absences from work). Sometimes, the order of questions or the frequency of interviews (annual versus quarterly) was changed. In a number of cases, the wording of an existing question was also changed or the response modalities were modified, but efforts were made to keep this to a minimum. The questionnaire in force from 2021 is available here: <https://statbel.fgov.be/en/themes/work-training/labour-market/employment-and-unemployment#documents>.

The implementation of the new LFS questionnaire was accompanied by a modified measurement of the labour market status. The new framework regulation brought this measurement into line with the adjusted operational definitions of employment and unemployment of the International Labour Office (ILO) of the International Labour Organization (ILO) (see further under 3.2). In addition, Eurostat, the statistical office of the European Union, strives for more input harmonisation through the legal imposition of flow charts that should ensure that the different EU Member States interpret and measure the essential concepts determining the labour market status in the exact same way (see Annex II of Implementing Regulation EU 2019/2240). Eurostat also provided a model questionnaire for this question block which EU Member States should follow as much as possible. Statbel fully followed that model questionnaire from 2021.

A second important part of the questionnaire is the block designed to measure the working time. Here, too, important changes have been made, the aim of which is again to ensure a more uniform measurement among the various EU Member States and thus to achieve results that are more comparable at European level. That model questionnaire was also followed by Statbel as much as possible.

In the following, we discuss in more detail the changes in the measurement of the labour market status (section 3.2) and the changes in the measurement of working time (section 3.3). We then turn to the break in the results due to the new measurement (in sections 4.1 and 4.2, respectively).

## 3.2 Changes to the definitions of employment and unemployment

The [Commission Implementing Regulation \(EU\) 2019/2240](#) of 16 December 2019 lays down the new definitions of employed and unemployed persons. The current and previous definitions are laid down in Annex 1.

The most important changes are described below.

### 3.2.1 Employed people

Regarding employment, in the Belgian LFS from 1999 to 2020, all persons with a job who were temporarily absent during the reference week were included as employed, except those in full career interruption (or time credit) for more than three months, and this from 2021. Persons who were temporarily absent due to temporary unemployment were considered as employed, irrespective of the duration of the absence.

From 2021, changes have been made to the classification of people with a job who are absent during the reference week. More specifically, it concerns changes in the labour market status (ILO status or status according to International Labour Office definitions) of persons in temporary unemployment, persons on parental leave and persons engaged in seasonal work. The first change in particular has important consequences, especially in times of crisis. According to the new operational ILO definition, people absent for “other reasons”, including temporary unemployment, are only counted as employed if they are absent for maximum three months. This means that from 2021 onwards, people who have already been temporarily unemployed on a full-time basis for more than three months are no longer counted as employed, which, given the COVID-19 crisis, has a significant impact on the employment and unemployment rates of 2021. In 2021, 40,000 persons on average were temporarily unemployed for more than three months. Before, they would have been considered as employed, and now 5,000 of them are classified among the ILO unemployed and 35,000 among the inactive. The majority of these long-term temporarily unemployed are therefore classified among the inactive, because they are not actively looking for a job. Another reason is that they are not available to start working within two weeks. Indeed, actively looking for a job and being available are two criteria to be considered as ILO unemployed.

Persons on parental leave are counted as employed, unless they do not receive any salary or benefit from the National Employment Office and are (or will be) on parental leave for more than three months.

Seasonal workers out of the season are considered employed only if they still regularly perform tasks or chores (e.g. maintenance work) for their job or enterprise during the off-season.

### 3.2.2 Unemployed people

As for the measurement of the number of unemployed people, the wording of the question was changed and the search methods were updated. Different from the past is that from 2021 on, passive methods (like waiting for the results of a competition for recruitment) will no longer be included in the list of search methods. Only if the respondent answers that he/she has not used any of the (active) search methods listed, the respondent is regarded as “passively looking for a job” and therefore not as ILO unemployed. After all, the ILO definition of unemployed implies that one must be actively looking for a job.

### 3.2.3 Changes in the measurement of working time

Analyses of working time results from different countries in the past revealed large measurement differences, which made the interpretation and comparison of results difficult. This is why Eurostat, in cooperation with the Member States, developed a model questionnaire for a uniform measurement of absences and working time. The ultimate goal was to better measure the effective number of hours worked during the reference week in the main job (= core variable HWACTUAL). In order to obtain comparable results with other countries, Statbel followed the model questionnaire as much as possible. Compared to the earlier questions on working hours asked until 2020, the new module is much longer and is composed of several sub-modules. Here are the main changes made in 2021:

- The order of the questions was reversed. Until 2020, this was the order of the main working time variables:
  - effective working time → overtime → usual working time → contractual working time.
  - Since 2021, the order was completely reversed: contractual working time → usual working time → overtime → effective working time.
- The wording of the questions was changed and, for the first time, reminders of holidays were added in the questionnaire itself. When there is a holiday in the reference week, the following is now added to the question (if relevant): *Please keep in mind that [date of holiday] was a holiday.*
  - More detailed questions are asked, especially about absences during the reference week in which the respondent worked. Until 2020, the LFS contained 8 questions on working time. In 2021, the LFS questionnaire contains 21 questions on working time, but the 21 questions are never all applicable to a single respondent. In addition to questions about days or half-day absences due to vacations or a holiday, illness or accident or other reasons, Statbel also asks about absences due to temporary unemployment (force majeure or economic reasons). The latter category was an important reason for absence during the COVID-19 crisis. In the data sent to Eurostat, absences due to temporary unemployment are included among the other reasons for absence, in our national publication they are listed separately, next to the category “other reasons”. In 2021, the LFS questionnaire also included 2 “COVID questions” on working time. If the difference between the number of hours actually worked and the number of hours usually worked was more than 4 hours, we asked whether this was due to the situation caused by the coronavirus (variables ACT2 and ACT3). In 2022, these questions were again deleted because they had become less relevant.
  - The maximum number of working hours that could be answered was 97h until 2020 and 95h from 2021 on.

## 4 Break in the LFS results due to the new measurement in 2021

### 4.1 Break in the employment and unemployment results

As mentioned above, the new measurement of the labour market status was an important part of the implementation of the new questionnaire. Below we report on how we tried to identify the impact of the new measurement on the employment and unemployment indicators. This analysis was also necessary for the calculation of backcasting factors to be supplied to Eurostat by the different Member States for 14 sets of policy-relevant indicators, for the period from 2009<sup>9</sup>. These series were published by Eurostat at the end of 2021, in addition to the previous series (historical series).

First, we explored the extent to which we could use the pilot survey data for this backcasting project, but they soon proved inadequate to serve as a basis for revising the series going back to 2009. An approach was eventually adopted where the old series were only minimally revised based on a number of concretely measurable changes in the definition of labour market status, as described in section 3.3. It is this latter approach that best clarifies the precise impact of the new measurement on the existing indicators.

#### 4.1.1 Comparison of the results of the pilot survey and regular survey

In this section, we look at the labour market status estimates based on the pilot survey and compare them with the estimates from the regular survey that was still based on the old questionnaire in 2020. As mentioned, the pilot survey used the same methodology as the regular survey, with the intention of being able to capture as much as possible the pure effect of the different measurements. Because the pilot survey consisted of only 2 waves, it also meant that we had to do the comparison with the regular survey based on identical waves.

In addition, we already took into account one specific element from the modified employment definition, namely the classification of persons absent due to temporary unemployment with a duration of more than three months<sup>10</sup>. In normal times, this group is negligible and can hardly have an impact on the measurement of the labour market status. But in 2020, the COVID-19 pandemic and associated government measures suddenly caused an exceptional rise in the number of temporarily unemployed, with the duration exceeding three months for a significant proportion of them. While this group was placed among the employed under the old definitions, this was no longer the case under the new definition. A strict application of the new operational definition implied that those persons were no longer considered as employed, but as inactive or unemployed, depending on their availability for a job and whether or not they were looking for another job.

When we wanted to compare the 2020 regular survey with the pilot survey that ran in parallel with the regular survey in 2020, it was important to look specifically at that group of temporarily unemployed people with a duration of more than three months, because this group suddenly became exceptionally large in 2020 and, precisely because

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<sup>9</sup> They are the number of employed persons by gender and four age groups (15-24, 25-64, 20-64 and 65+) and the number of unemployed persons by gender and three age groups (15-24, 25-64 and 65+). For more info: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU\\_labour\\_force\\_survey\\_-\\_correction\\_for\\_breaks\\_in\\_time\\_series](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_labour_force_survey_-_correction_for_breaks_in_time_series)

<sup>10</sup> Belgium has long had a system of temporary unemployment, either “temporary unemployment due to force majeure” or “temporary unemployment due to economic reasons”. In the 2020-2022 period, temporary unemployment related to the coronavirus could be considered temporary unemployment due to force majeure. See <https://www.rva.be/werkgevers/tijdelijke-werkloosheid/tijdelijke-werkloosheid-wegens-de-coronapandemie-of-de-oorlog-in-oekraïne-overgangsregeling-vanaf-01.07.2022#:~:text=Vanaf%2001.07.2022%20gelden%20terug,wordt%20in%20zijn%20normale%20betekenis.>

of this, had a major impact on the measurement of the labour market status. The old questionnaire, as used in the regular survey in 2020, included a measurement of the number of people in a system of temporary unemployment, but did not gauge its duration. Nevertheless, it was important to be able to estimate the proportion of temporarily unemployed persons for more than 3 months in order to assess its impact on the measurement of the labour market status. Initially, the new questionnaire, as developed for the pilot survey, did not provide a separate measurement of temporary unemployment, nor of its duration. As it became clear in 2020 that this would be an important category, this was adjusted in the new questionnaire from 2021. As a result, since 2021 we do possess information that allows us to specifically identify who was in a system of temporary unemployment during the reference week and whether this had been the case for more than three months. Together with the figures from the National Employment Office on the number of people who used the temporary unemployment system in that period, we were able to estimate the number of people who were temporarily unemployed for more than three months for the different quarters of 2020 (see also further under 4.1.2).

Based on these elements, when comparing the results of the regular survey versus the pilot survey, we already applied a correction to the figures of the regular survey, so that that comparison would already be cleaned up for the effect of that long-term temporary unemployment in 2020. The result of that comparison is shown in Table 3, which presents the estimates of the number of employed and the number of unemployed, broken down by age group and gender. Note that these figures differ from the official indicators for the reasons mentioned above (i.e. the correction for long-term temporary unemployment and the use of a sample consisting of 2 waves instead of 4). The rightmost column shows the difference between the two estimates and indicates whether this difference is significant or not. To evaluate this significance, we looked at whether or not the confidence intervals overlapped at a significance level of 95% and 99%, respectively. The exact confidence intervals are available in Annex 2.

If we look at the general employment rate of the population aged 20-64, we see that the difference between the two estimates is significant at a confidence level of 95%, but not at a level of 99%. Surprisingly, the difference in the total figure is almost entirely due to the rather large difference in the employment of women. For men, the difference is much smaller and not significant.

The figures on unemployment present a similar picture. Again, we see a significant difference between the estimates from the regular survey and the pilot survey when looking at the overall level of unemployment for the population aged 15-64. But when we look at the gender breakdown, we only see a significant difference in female unemployment.



**Table 3: Estimates of the number of employed and unemployed people according to the regular survey and the pilot survey - 2020 (all quarters) (x1,000)**

|                                    |                    | Estimate regular survey<br>Limited sample + new<br>definition applied | Estimate pilot survey | Difference  |
|------------------------------------|--------------------|---|-----------------------|-------------|
| <b>Number of employed people</b>   | <b>Total 20-64</b> | <b>4,579</b>  | <b>4,458</b>          | <b>121*</b> |
|                                    | Men 20-64          | 2,431   | 2,419                 | 12          |
|                                    | Women 20-64        | 2,148   | 2,039                 | 109**       |
|                                    | <b>Total 15-24</b> | <b>301</b>  | <b>319</b>            | <b>-18</b>  |
|                                    | Men 15-24          | 171   | 191                   | -21         |
|                                    | Women 15-24        | 131   | 128                   | 3           |
|                                    | <b>Total 25-64</b> | <b>4,320</b>  | <b>4,204</b>          | <b>115*</b> |
|                                    | Men 25-64          | 2,284   | 2,271                 | 13          |
|                                    | Women 25-64        | 2,036   | 1,933                 | 102**       |
| <b>Number of unemployed people</b> | <b>Total 15-64</b> | <b>313</b>  | <b>375</b>            | <b>-63*</b> |
|                                    | Men 15-64          | 177   | 190                   | -12         |
|                                    | Women 15-64        | 135   | 186                   | -50**       |
|                                    | <b>Total 15-24</b> | <b>61</b>   | <b>84</b>             | <b>-23*</b> |
|                                    | Men 15-24          | 33  | 51                    | -17*        |
|                                    | Women 15-24        | 28  | 34                    | -6          |
|                                    | <b>Total 25-64</b> | <b>251</b>  | <b>291</b>            | <b>-39</b>  |
|                                    | Men 25-64          | 144   | 139                   | 5           |
|                                    | Women 25-64        | 107   | 152                   | -45**       |

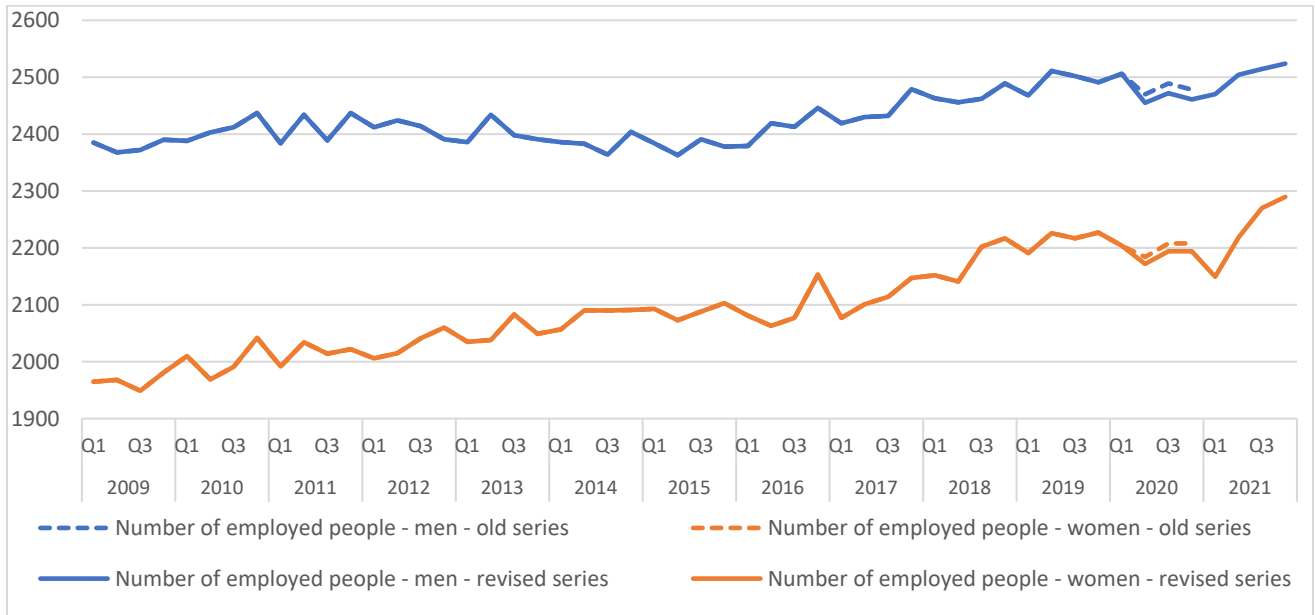
\* 95% significance; \*\* 99% significance

We could find no explanation why the comparison between the regular survey and the pilot survey yielded such different results for men and women, so we suspect it must be a combination of the changed measurement and chance fluctuations. We should not forget that from the end of March, the data collection was severely disrupted by the COVID-19 pandemic which meant that the method of interviewing was different from what had been anticipated (telephone instead of face-to-face) and, in addition, it also resulted in a lower response rate and consequently a smaller sample.

#### 4.1.2 Backcast of the employment and unemployment indicators

Given these results, difficult to explain, from the pilot survey and, in particular, the large differences between men and women, it did not seem appropriate to revise past series on this basis, as originally envisaged. Instead, we tried to break down the impact of the main changes to the operational definition of labour market status into different components and then map the impact for each component. We used this information to perform a limited backcasting of the series since 2009. For the 2009-2019 period, the revision was limited to unemployment rates. For employment, only the figure for 2020 was revised. These revised series were delivered to Eurostat as part of Eurostat's backcasting project.

**Chart 2: Number of employed people (x1,000) aged 20-64 per gender: old versus revised series (Q1 2009 - Q4 2021)**



**Chart 3: Number of unemployed people (x1,000) aged 15-64 per gender: old versus revised series (Q1 2009 - Q4 2021)**



Section 3.2 gave an overview of the main changes to the definitions of employment and unemployment that are relevant within our national context. As regards employed people, this mainly concerns the classification of persons in employment who did not work during the full reference week, in particular the following three categories: (1) *persons in full time temporary unemployment for more than three months*, (2) *persons on parental leave without salary or benefits from the National Employment Office and for more than three months* and (3) *out-of-season seasonal workers*. Based on the data from the pilot survey and the new regular survey from 2021, we could conclude that the impact of the latter two categories was negligible. It is mainly the category of temporarily unemployed that causes a break between the 2020 and 2021 results, even if that break remains (quite) limited on an annual basis.

The same three categories also play a role in measuring the number of unemployed. If one is not among the employed, one is logically either unemployed or inactive. In addition, a fourth factor in determining whether a person is unemployed or inactive is the type of search method used when looking for a job. The new definition on the unemployed no longer takes *passive search methods* into account.

Below, we describe how we examined the impact of these four different components on the measurement of the labour market status before and after the reform in 2021.

#### 4.1.2.1 Temporary unemployment with a duration of more than three months: revision employment and unemployment 2020

Above, we have already briefly shown how, based on the information from the regular survey from 2021, combined with figures from the National Employment Office, we tried to estimate the number of people who were in a system of temporary unemployment for more than three consecutive months in 2020. The methodology used is explained in more detail here.

To correct the 2020 series, we needed to estimate two specific components.

- First, we needed an estimate of the number of long-term temporary unemployed per quarter of 2020. For this we started from the total number of temporarily unemployed who had been absent (not working) during the whole reference week, as measured by variable q22 in the old questionnaire. For this group, we then had to determine the share of those for whom the duration of temporary unemployment exceeded three consecutive months. For this we relied on the figures from the first quarters of 2021 (in which the system of temporary unemployment was still widely used), together with administrative figures from the National Employment Office<sup>11</sup> that were recalculated in such a way as to approach the LFS definition as closely as possible<sup>12</sup>. This approach was applied by month and then converted to numbers by quarter. Thus, it was also taken into account that, given the beginning of the first lockdown in March 2020 and the extension of the system of temporary unemployment shortly afterwards, the earliest the three-month duration could be reached was June 2020.

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<sup>11</sup> Statbel thanks Michiel Segaeert of the National Employment Office for making available customised figures on temporary unemployment and parental leave.

<sup>12</sup> A key difference between the National Employment Office's measurement and the LFS measurement is that the latter involves estimates of average numbers within a quarter, based on measurements in each of the 13 reference weeks of that quarter. The National Employment Office's figures involve total volumes of people who used the system of temporary unemployment within a given reference period (e.g. a month or a quarter).

- It was then necessary to determine what proportion of these persons, who were working under the old definition, would be inactive or unemployed under the new definition. Again, we used the 2021 regular survey to estimate these shares for 2020. The same approach was followed to apply corrections to the breakdowns by age group and gender (i.e. use the observed ratios from 2021 and apply them to the 2020 data).

These estimates were used to correct the figures for the 4 quarters of 2020 for both the employed and the unemployed (and consequently the inactive).

#### 4.1.2.2 Correction for passive search methods: revision unemployment 2009-2020

An important change in the measurement of the number of unemployed people relates to the changed response categories to the question on job search methods. From 2021 on, passive search methods are no longer included in the list of search methods. Only when the respondent answers that he/she has not used any of the (active) search methods listed, the respondent is regarded as “passively looking for a job” and therefore not as ILO unemployed. Until 2020, the list of search methods in the Belgian LFS included a number of passive search methods and a “no initiative taken” category. These passive search methods were:

- You have been waiting for an offer by VDAB, Actiris, Forem or ADG or the local job shop
- You have been waiting for an offer from an interim / a selection bureau, a head hunter’s agency, a local employment agency (“ALE”)
- You have been waiting for the results of a competition for recruitment

By removing these passive search methods from the list of search methods in 2021, we can assume that the number of passive job seekers has decreased. In the first three quarters of 2021, there were an average of 4,000 available jobseekers who stated that they did not use any of the listed (active) search methods. In 2020, an equal number of 4,000 available jobseekers reported not having used any of the listed (active + passive) search methods (i.e. not having taken the initiative to search), but nearly 6,000 persons still cited one of the 3 listed passive search methods.

Based on the assumption that respondents seeking work and available for work but reporting only passive search methods in 2009-2020 would most likely have reported an active search method should they have been offered the current list of search methods, we made a small revision to the number of unemployed for the period 2009-2020. This led to a slight increase in the number of unemployed.

#### 4.1.2.3 Parental leave: no correction

In Belgium, the maximum duration of paid full-time parental leave is 4 months per child. These 4 months can be divided into periods of one month or multiples thereof. In the past, persons on parental leave were counted among the employed when the total duration of parental leave was up to three months, regardless of whether they received a salary or benefits.

Under the new operational definition of employment, all persons on parental leave are counted as employed unless they do not receive any salary or benefits from the National Employment Office and are (or will be) on parental leave for more than three months. Based on the results of our pilot survey in 2020 and the results of the regular survey of the first four quarters of 2021, the number of people on parental leave for more than three months and without any salary or benefits from the National Employment Office is less than 1,000 people. In addition, administrative data from the National Employment Office also show that only a very small proportion of those receiving benefits from

the National Employment Office due to parental leave take it for four consecutive months. We therefore considered it unlikely to have an impact on employment estimates and did not correct for the changed measurement of parental leave.

#### 4.1.2.4 Seasonal workers: no correction

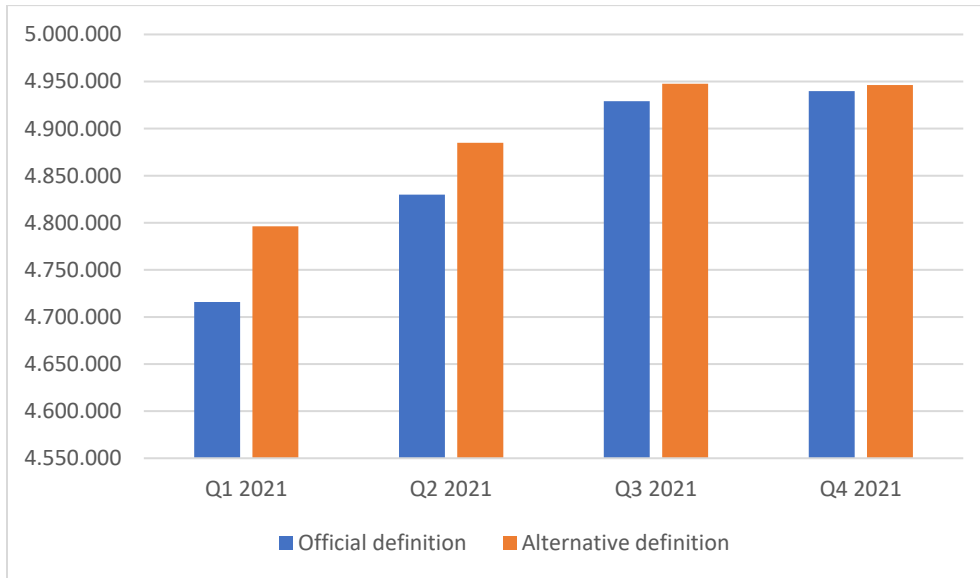
Until 2020, the LFS questionnaire did not contain separate questions or specifications for seasonal workers, so they were counted as employed if they were at work during the reference week or if they answered that they were temporarily absent from work. From 2021 on, off-season seasonal workers are only counted as employed if they indicated that they were still regularly performing tasks or chores (e.g. maintenance work) for their jobs or enterprise even during the off-season. The 2021 figures show that this is again only a small group. The total number of people who report being absent due to seasonal work averages 3,200, and 1,400 of them indicate that they regularly perform off-season tasks or small chores for the job or the enterprise. Again, therefore, we conclude that the impact on the estimates of employment is negligible and we have not corrected for this modified measurement of seasonal workers.

#### 4.1.3 National figures: no revision

Unlike the series delivered to Eurostat as part of the backcasting project, we decided not to make any adjustments to the official series for national purposes. With the exception of the year 2020, the revision is so small and the benefits do not outweigh the practical disadvantages. Moreover, backcasting the old series could create the illusion of completely break-free series, which cannot possibly be the case given the 2017 reform. We may assume that the various methodological reforms of 2017 ensured a greater break in the series than the introduction of the new questionnaire in 2021.

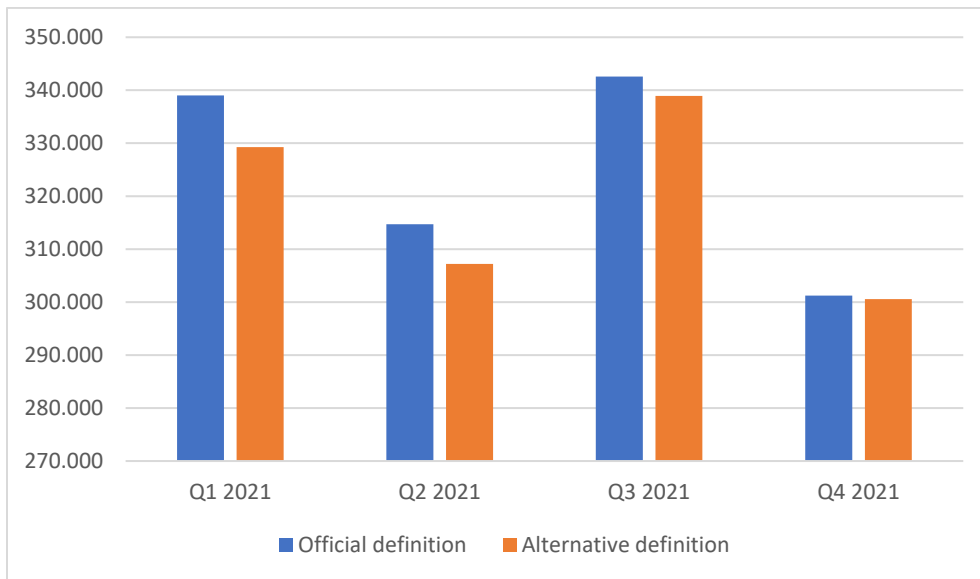
However, we did follow a reverse reasoning, namely, instead of adjusting the old series to the new definition, we published alternative indicators in 2021, treating the temporarily unemployed for more than three months as in the old definition (as employed). Within their own national context, it is also more logical to consider those persons as employed given that they keep their jobs, as well as the rights associated with them (such as in terms of pension and social security) and they also continue to receive up to 70% of their wages. Also, the effect of this modified component was limited to the period when, because of the COVID-19 pandemic, massive use was made of the system of temporary unemployment due to force majeure and which, moreover, could also exceed the duration of three consecutive months. As the COVID-19 measures were increasingly relaxed, we clearly saw in 2021 that this group became smaller every quarter and that the difference between the official and so-called alternative employment and unemployment figures gradually faded out. Whereas in the first quarter of 2021, 80,000 people in temporary unemployment for more than three months were still recorded, that number fell to 55,000 in the second quarter, 19,000 in the third quarter and 6,000 in the fourth quarter. Charts 4, 5 and 6 show the number of employed people, the number of unemployed people and the number of inactive people aged 15 and over according to the official and alternative definitions, respectively.

**Chart 4: Number of employed persons aged 15 and over according to the official and alternative definition\* (Q1 2021 - Q4 2021)**



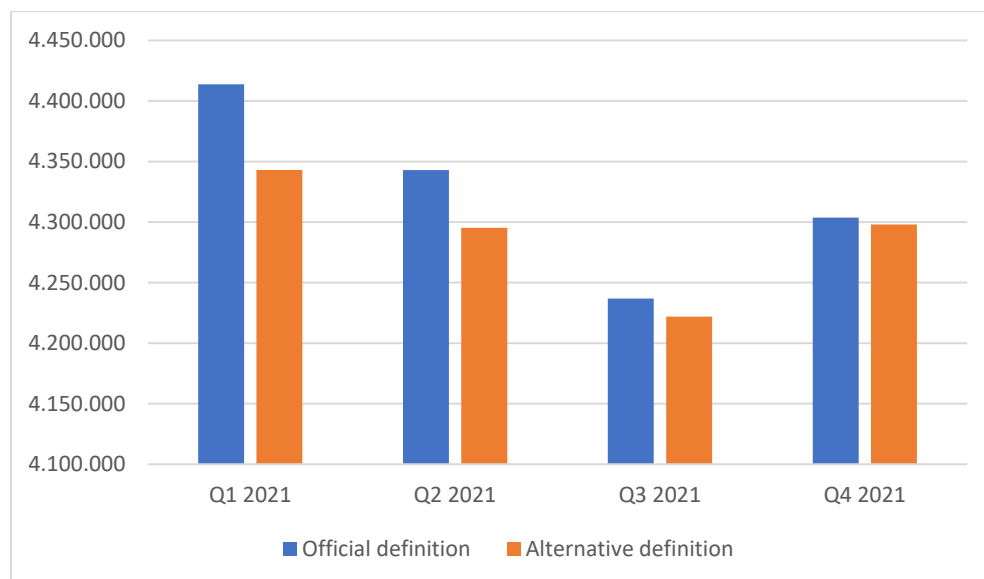
\* Temporarily unemployed people for more than three months are considered as employed in the alternative definition

**Chart 5: Number of unemployed persons aged 15 and over according to the official and alternative definition\* (Q1 2021 - Q4 2021)**



\* Temporarily unemployed people for more than three months are considered as employed in the alternative definition

**Chart 6: Number of inactive persons aged 15 and over according to the official and alternative definition\* (Q1 2021 - Q4 2021)**



\* Temporarily unemployed people for more than three months are considered as employed in the alternative definition

## 4.2 Break in the results on working time

Section 3.3 listed the changes to the questions on working time. As a result of the changes made, we expected a break in the results on working time, more specifically a decrease in the average number of hours actually worked compared to the previous measurement and this because of the more detailed questions on absences and the maximum limit of 95 hours (instead of 97 hours previously).

Below, we first compare the results of the pilot survey with those of the regular survey and then the official 2021 results with those of previous years.

### 4.2.1 Comparison of the results of the pilot survey and regular survey

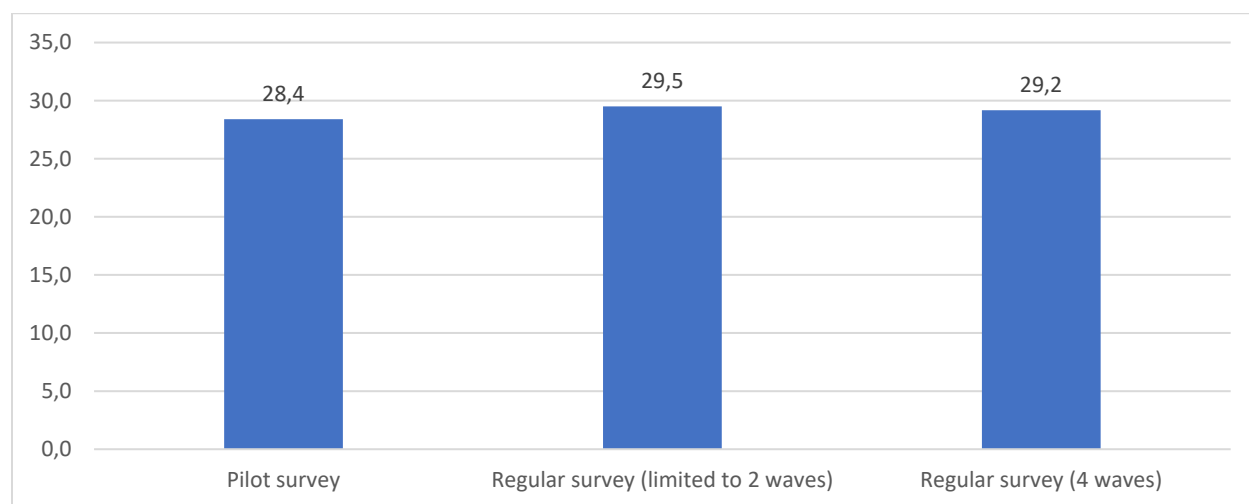
In Chart 7, we place the average number of hours actually worked per week based on the pilot survey next to the results based on the regular survey where we limit ourselves to the first two waves (see section 2.2) on the one hand and the official results (based on the four waves) on the other.

This chart shows the average number of hours actually worked in the main job of all employed people, including those who did not work during the reference week. The figures refer to the year 2020. They show that the average working time is the lowest according to the pilot survey (28.4 hours per week), followed by the official results of the regular survey (based on the 4 waves) (29.2 hours per week) and the regular survey limited to 2 waves (29.5 hours). The same applies to the quarterly results (Chart 8).

However, we should note here that a different employment definition was used in the pilot survey (new definitions) and the regular survey (old definitions). The main difference between the old and new employment definitions is

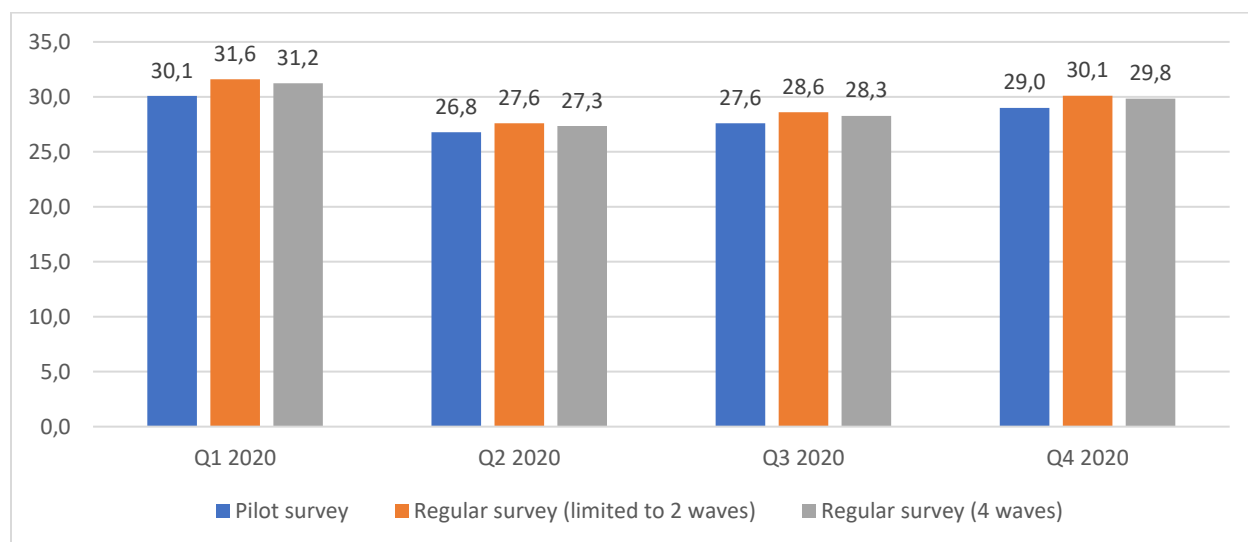
the treatment of persons in temporary unemployment for more than three months. Had the 2021 definition been used in the 2020 regular survey, the people in temporary unemployment for more than three months would not have been considered as employed and would have been excluded from the calculation of the average effective working time in 2020. As a result, the average number of hours actually worked would have been higher in the regular survey, which would have made the difference between the results of the pilot survey and the regular survey even larger. To demonstrate this, we take a closer look at the results of the first quarter of 2020, as this is a quarter with no temporarily unemployed persons with a duration longer than three months. In this quarter, the difference between the results of the pilot survey and the regular survey (limited to 2 waves) is 1.5 hours (Chart 8). As expected, the average working time calculated according to the model questionnaire to be implemented from 2021 is lower than the average working time according to the old questionnaire applied in the regular survey until 2020. This is also the case in the other 3 quarters of 2020, but the difference is smaller (0.8 hours in Q2, 1.0 in Q3 and 1.1 in Q4). This is most likely related to the higher number of people in temporary unemployment for more than three months and their impact on the employment definition.

**Chart 7: Average number of hours actually worked per week\* - all employed - main job (2020)**



\*Employed people who did not work during the reference week (= 0 hours worked) are included.



**Chart 8: Average number of hours actually worked per week\* - all employed - main job - quarterly results (2020)**

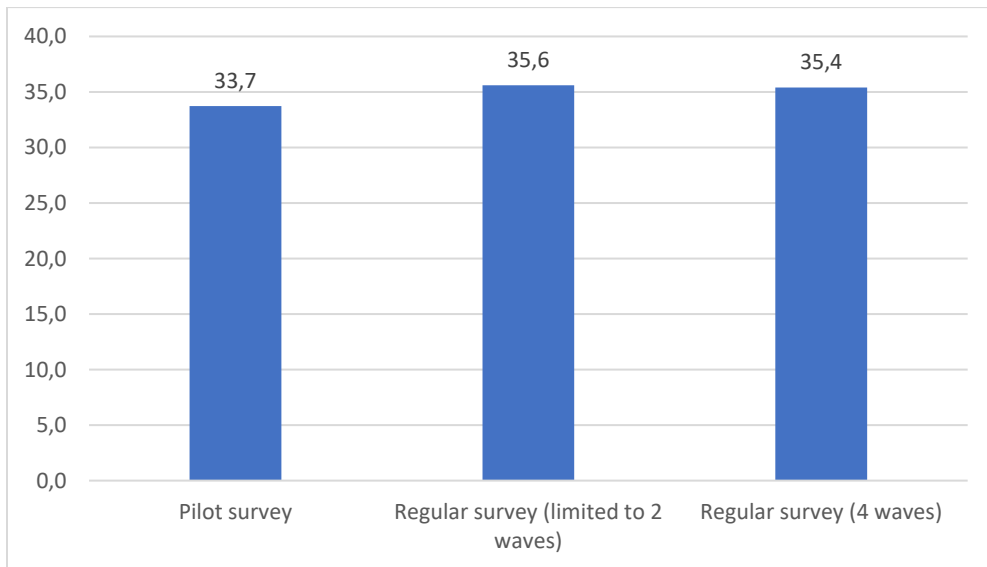
\*Employed people who did not work during the reference week (= 0 hours worked) are included.

Another way to better compare the results of the pilot survey with the regular survey is to exclude individuals who were not working during the reference week. In this way, persons in temporary unemployment for more than three months are excluded in both the pilot survey and the regular survey.

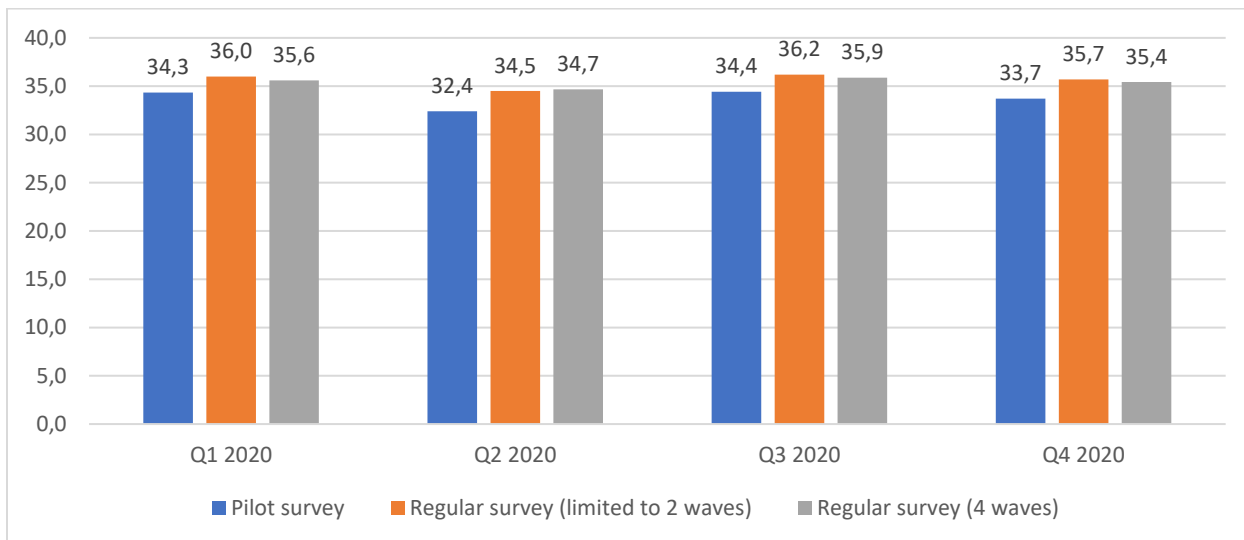
Chart 9 shows that there is a difference of 1.9 hours between the average weekly effective working time measured according to the pilot survey on the one hand and according to the regular survey limited to 2 waves on the other. The difference is the greatest in the second quarter of 2020 (2.1 hours) (Chart 10), which is the quarter with the greatest impact of the COVID crisis on hours worked. We assume that the 2021 questionnaire better measures half- or full-day absences due to temporary unemployment (due to force majeure or economic reasons) than the earlier questionnaire. This could also explain the slightly larger difference between the 2 measurements in quarters 2 and 4 of 2020, in which temporary unemployment for a few (half) days in the reference week was more common than in quarters 1 and 3 of 2020.

Thus, based on the comparison of the pilot survey with the regular survey limited to the 2 first waves, we could conclude that the average number of hours actually worked is about 1.5 to 2 hours lower due to the new questionnaire. On the other hand, we also find that the average working time is 0.2 hours lower when working with 4 waves instead of 2 waves.

**Chart 9: Employed people who worked at least 1 hour during the reference week: average number of hours actually worked per week - main job (2020)**



**Chart 10: Employed people who worked at least 1 hour during the reference week: average number of hours actually worked per week - main job - quarterly results (2020)**



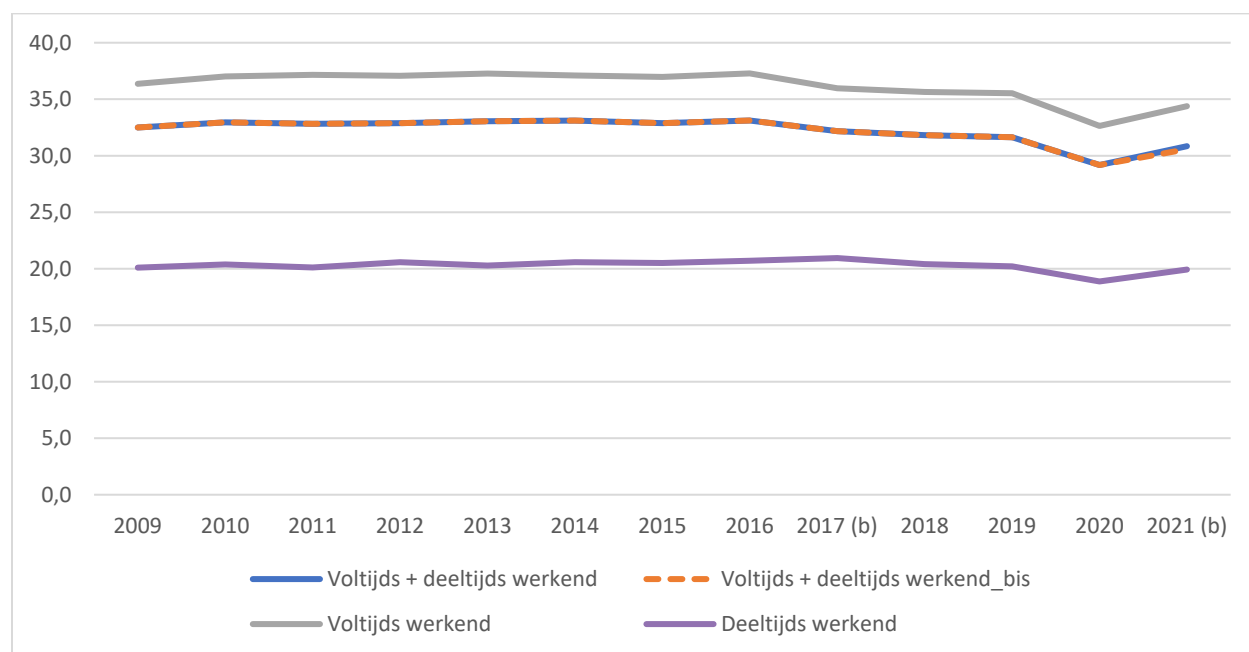
## 4.2.2 Comparison of the results for 2021 with the official results of the previous years

### 4.2.2.1 Annual results

Looking at the official annual results of average effective working time per week (Chart 11), we see a fairly stable series between 2009 and 2016 with an average of around 33 hours per week for full-time and part-time workers combined. We then note a slight drop in 2017 with an average of 32.2 hours per week (break due to methodological reform). This decline then continues slightly to an average of 31.6 hours in 2019. In 2020, the average effective working time per week drops sharply due to the COVID-19 crisis. If, as in Chart 11, all employed people are considered, including those who did not work during the reference week, the average effective working time falls from 31.6 hours to 29.2 hours per week between 2019 and 2020. In 2021, we note a slight increase in working hours to an average of 30.8 hours worked per week, which remains below pre-crisis levels. The revival of the labour market in 2021 causes an increase in working hours on the one hand but, on the other hand, the crisis was not over and temporary unemployment was still frequently used<sup>13</sup>, which translates into lower average working hours.

We should also take into account the fact that the change in the employment definition caused an increase in the average effective working hours of employed people (including those who did not work) in 2021. Had that definition remained unchanged in 2021, 40,000 people who had worked 0 hours because of temporary unemployment lasting more than three months would have been taken into account for the calculation of average effective working time. Because of the changed employment definition, those temporarily unemployed are no longer counted as employed. Should they have been considered as employed, as in 2020, the average effective working time in 2021 would be 30.6 hours per week instead of 30.8 hours (see full-time + part-time working\_bis in Chart 11).

**Chart 11: Average number of hours actually worked per week\* - all employed - main job (2009-2021)**



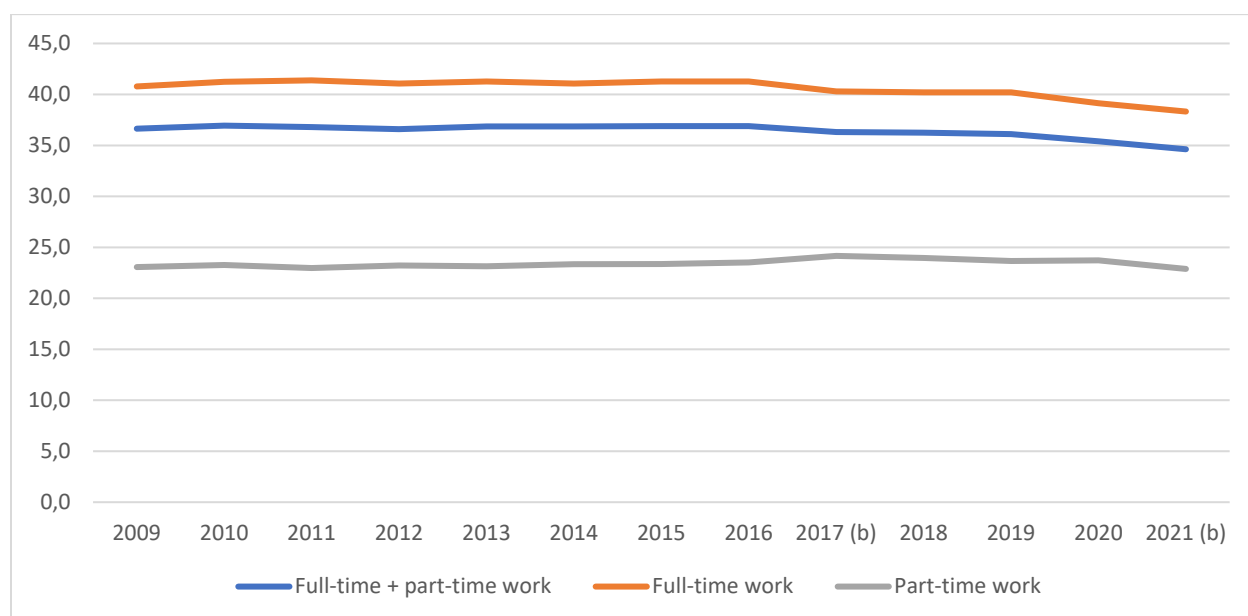
\*Employed people who did not work during the reference week (= 0 hours worked) are included.

<sup>13</sup> If the duration of (full-time) temporary unemployment is less than three months, the respondent continues to be considered as employed.

If we exclude those with a job who were absent during the full reference week (Chart 12), the decline in average hours actually worked per week is less pronounced. Between 2019 and 2020, the average effective working time falls from 36.1 hours to 35.4 hours per week. But contrary to what we see when we include employed people who worked 0 hours, the average working hours of people with jobs who worked at least 1 hour during the reference week continues to fall in 2021 as well, to 34.6 hours per week. Possible explanations for this are:

- A shift in the type of temporary unemployment. Table 4 shows that the average number of temporarily unemployed who were absent for the entire reference week was much higher in 2020 than in 2021 (150,000 on average in 2020 compared to 19,000 on average in 2021). So when that group is omitted when calculating the average number of hours actually worked, the impact is much higher in 2020 than in 2021 when there were far fewer persons with 0 hours worked. A large proportion of those who worked 0 hours in 2020 may have returned to work in 2021, but may still be working fewer hours than before the crisis, resulting in lower average hours worked than before the COVID-19 crisis.
- An effect of the changed measurement of working time, which we also observed based on the pilot survey. This mainly involves a better measurement of minor absences, resulting in a figure in 2021 that is still one and a half hours lower than in 2019.

**Chart 12: Employed people who worked at least 1 hour during the reference week: average number of hours actually worked per week - main job (2009-2021)**



**Table 4: Number of employed people in temporary unemployment due to force majeure (Covid-19) or to economic reasons (employed population), as reason not to work or to work less\* (x 1,000)**

|  | Q1<br>2020 | Q2<br>2020 | Q3<br>2020 | Q4<br>2020 | Y<br>2020  | Q1<br>2021 | Q2<br>2021 | Q3<br>2021 | Q4<br>2021 | Y<br>2021 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|
| Did not work during the reference week | 69         | 377        | 51         | 103        | <b>150</b> | 36         | 20         | 8          | 11         | <b>19</b> |
| Worked less during the reference week  | 46         | 230        | 56         | 61         | <b>98</b>  | 94         | 59         | 31         | 29         | <b>53</b> |

\* results based on various questions in 2020 and 2021 + results for 2021 without temporary unemployment longer than three months.

#### 4.2.2.2 Quarterly results

Looking at quarterly results over a longer period, we again see a decline in the average effective working time from 2017 onwards (break because of methodological reform). But contrary to expectations, the average number of hours worked in the first quarter of 2021 is slightly higher (33.3 hours) than in the first quarters of 2018 (33.2 hours) and 2019 (33.0 hours) (Chart 13). Apart from the two possible explanations we cited above (shift in the type of temporary unemployment and changed measurement of working hours), there may also be an opposite effect because of some technical problems when the fieldwork started in the first quarter of 2021. Due to those technical problems, the fieldwork could only start later than planned, which meant that the interview for the first reference weeks of 2021 could not take place immediately after the reference week. This may have caused some respondents to forget to report certain absences at the beginning of the year. The fact that the first reference week started later and after the holidays (4 January) than in 2018 (1 January) and 2019 (31 December) may also play a role in the slightly higher average working hours in the first quarter of 2021 than in the first quarters of 2018 and 2019.

In the second, third and fourth quarters of 2021, the average effective working time is below that of the same quarters in the years before the COVID-19 crisis. This confirms the hypothesis of an effect of the new measurement of working time, combined with the fact that a significant number of people are still in temporary unemployment.

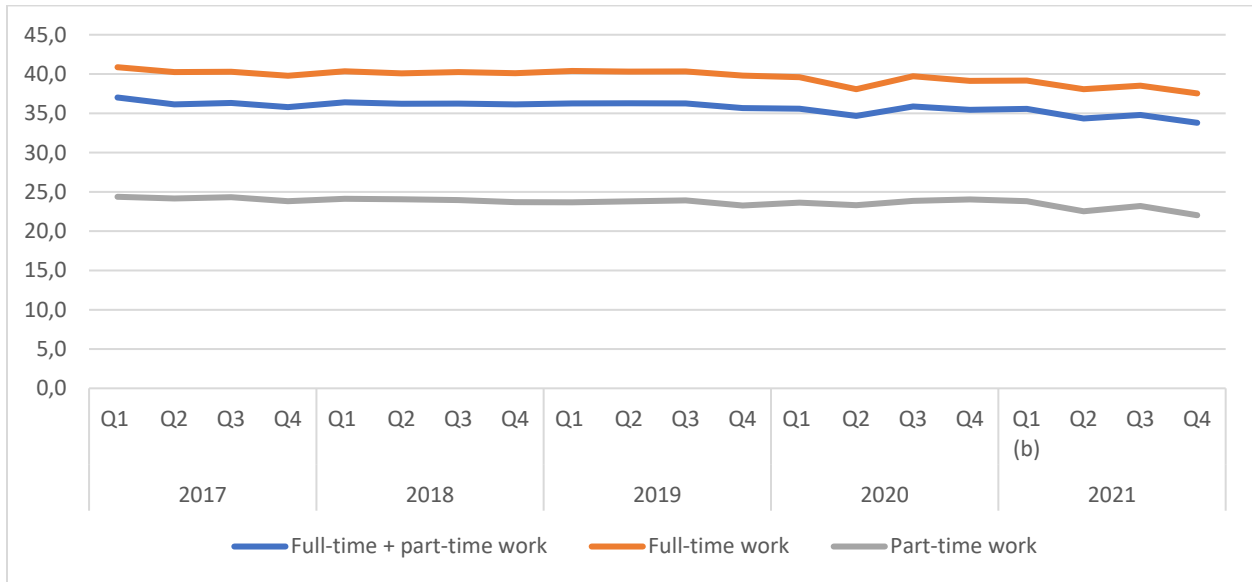
Taking into account only employed people who worked at least 1 hour during the reference week (Chart 14), we see that the average number of hours worked for all quarters except the first is lower in 2021 than in 2020.

**Chart 13: Average number of hours actually worked per week\* - all employed - main job (Q1 2009 - Q4 2021)**

\*Employed people who did not work during the reference week (= 0 hours worked) are included.



**Chart 14: Employed people who worked at least 1 hour during the reference week: average number of hours actually worked per week - main job (Q1 2009 - Q4 2021)**



## 5 Conclusion

In this analysis, we described how Statbel implemented the new framework regulation on integrated European social statistics (IESS FR) in the Labour Force Survey (LFS). To meet the obligations of this framework regulation, the LFS questionnaire was completely renewed, the new employment and unemployment definitions were implemented, and model questionnaires were used to measure the labour market status and working time in a more uniform way. All this is aimed at increasing comparability among EU Member States.

Despite the difficult data collection conditions due to the COVID-19 crisis, Statbel managed to successfully implement the new LFS questionnaire from 2021 onwards and estimate the impact of the changed measurement on employment and unemployment on the one hand and on working time on the other.

It is mainly the changed definition of employment that had an impact on employment and unemployment results in 2021. Had people in temporary unemployment for more than three months - as before - been classified as employed, the number of employed people in 2021 would have been 40,000 units higher and the number of unemployed and inactive people 5,000 and 35,000 units lower, respectively. Given that the number of people in temporary unemployment for more than three months is limited or non-existent in normal circumstances, we expect little impact from this definition change in coming years. Other changes have only a limited impact on employment and unemployment rates.

The introduction of the model questionnaire on working time provided by Eurostat has a downward effect on the average number of hours actually worked per week, partly because of a better measurement of absences. We can conclude that the average number of hours worked per week is about 1.5 to 2 hours lower as a result of using the new questionnaire.

## Annex 1: Previous and current definitions of employment and unemployment

### Definition of employed persons:

#### Previously (up to and including 2020):

The employed comprise all people aged 15 and over who:

- (a) during the reference week performed some work for wage or salary, or for profit. This also includes family workers.
- (b) had a job but did not work during the entire reference week

#### From 2021 (new operational ILO definition (ICLS Resolution 2013))

Employed persons comprise persons aged 15 to 89 who, during the reference week, were in one of the following categories:

- (a) persons who during the reference week worked for at least 1 hour for pay or profit, including contributing family workers;
- (b) persons with a job or business who were temporarily not at work during the reference week but had an attachment to their job, where the following groups have a job attachment;
  - persons not at work due to holidays, working time arrangements, sick leave, maternity or paternity leave;
  - persons in job-related training;
  - persons on parental leave, either receiving and/or being entitled to job-related income or benefits, or whose parental leave is expected to be 3 months or less;
  - seasonal workers during the off-season, where they continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations;
  - persons temporarily not at work for other reasons where the expected duration of the absence is 3 months or less;

### Definition of ILO unemployed persons:

#### Up to and including 2020

Unemployed persons comprise persons aged 15 to 74 who were:

- a) without work during the reference week, i.e. neither had a job nor were at work (for one hour or more) in paid employment or self-employment;
- b) available for work, i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week, and;
- c) actively seeking work, i.e. had taken specific steps in the four week period ending with the reference week to seek paid employment or self-employment or who found a job to start later, i.e. within a period of at most three months.



The following are considered as specific steps (i.e. active search):

- having been in contact with a public employment office to find work, whoever took the initiative (renewing registration for administrative reasons only is not an active step);
- having been in contact with a private agency (temporary work agency, firm specialising in recruitment, etc.) to find work;
- applying to employers directly;
- asking among friends, relatives, unions, etc., to find work;
- placing or answering job advertisements;
- studying job advertisements;
- taking a recruitment test or examination or being interviewed;
- looking for land, premises or equipment;
- applying for permits, licences or financial resources.

From 2021 (new operational ILO definition (ICLS Resolution 2013))

Unemployed persons comprise persons aged 15 to 74 who were:

- a) during the reference week not employed and
- b) currently available for work, i.e. were available for paid employment or self-employment before the end of the 2 weeks following the reference week
- c) actively seeking work, i.e. had either carried out activities in the four-week period ending with the reference week to seek paid employment or self-employment or found a job to start within a period of at most 3 months from the end of the reference week.

For the purposes of identifying active job search, such activities are:

- studying job advertisements;
- placing or answering job advertisements;
- placing or updating CVs online;
- contacting employers directly;
- asking friends, relatives or acquaintances;
- contacting a public employment service;
- contacting a private employment agency;
- taking a test, interview or examination as part of a recruitment process, and;
- making preparations to set up a business.

## Annex 2: Estimates and confidence intervals regular survey (2 waves) versus pilot survey 2020 (all quarters) (x1,000)

|              |                    | Estimate regular survey (new definition applied) | Estimate pilot survey | Difference  | 95CI Regular |              | 95CI pilot   |              | 99CI Regular |              | 99CI pilot   |              | 99.9CI regular |              | 99.9CI pilot |              |
|--------------|--------------------|--|-----------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|
|              |                    |  |                       |             | Lower limit  | Upper limit  | Lower limit  | Upper limit  | Lower limit  | Upper limit  | Lower limit  | Upper limit  | Lower limit    | Upper limit  | Lower limit  | Upper limit  |
| Employment   | <b>Total 20-64</b> | <b>4,579</b>                                     | <b>4,458</b>          | <b>121*</b> | <b>4,541</b> | <b>4,616</b> | <b>4,382</b> | <b>4,533</b> | <b>4,529</b> | <b>4,628</b> | <b>4,358</b> | <b>4,557</b> | <b>4,515</b>   | <b>4,642</b> | <b>4,331</b> | <b>4,585</b> |
|              | Men 20-64          | 2,431  | 2,419                 | 12          | 2,407        | 2,455        | 2,371        | 2,467        | 2,399        | 2,462        | 2,356        | 2,482        | 2,390          | 2,471        | 2,338        | 2,499        |
|              | Women 20-64        | 2,148  | 2,039                 | 109**       | 2,122        | 2,175        | 1,986        | 2,092        | 2,113        | 2,183        | 1,969        | 2,109        | 2,104          | 2,193        | 1,950        | 2,128        |
|              | <b>Total 15-24</b> | <b>301</b>                                       | <b>319</b>            | <b>-18</b>  | <b>287</b>   | <b>316</b>   | <b>291</b>   | <b>347</b>   | <b>283</b>   | <b>320</b>   | <b>282</b>   | <b>356</b>   | <b>278</b>     | <b>325</b>   | <b>271</b>   | <b>367</b>   |
|              | Men 15-24          | 171  | 191                   | -21         | 161          | 181          | 171          | 211          | 158          | 184          | 165          | 217          | 154            | 187          | 158          | 225          |
|              | Women 15-24        | 131  | 128                   | 3           | 121          | 140          | 109          | 146          | 119          | 143          | 103          | 152          | 115            | 146          | 97           | 159          |
|              | <b>Total 25-64</b> | <b>4,320</b>                                     | <b>4,204</b>          | <b>115*</b> | <b>4,284</b> | <b>4,355</b> | <b>4,134</b> | <b>4,275</b> | <b>4,273</b> | <b>4,366</b> | <b>4,111</b> | <b>4,298</b> | <b>4,260</b>   | <b>4,379</b> | <b>4,085</b> | <b>4,324</b> |
|              | Men 25-64          | 2,284  | 2,271                 | 13          | 2,262        | 2,306        | 2,227        | 2,315        | 2,255        | 2,313        | 2,213        | 2,329        | 2,247          | 2,321        | 2,197        | 2,345        |
|              | Women 25-64        | 2,036  | 1,933                 | 102**       | 2,010        | 2,061        | 1,883        | 1,984        | 2,002        | 2,069        | 1,867        | 2,000        | 1,993          | 2,078        | 1,848        | 2,018        |
| Unemployment | <b>Total 15-64</b> | <b>313</b>                                       | <b>375</b>            | <b>-63*</b> | <b>295</b>   | <b>330</b>   | <b>340</b>   | <b>410</b>   | <b>290</b>   | <b>336</b>   | <b>329</b>   | <b>421</b>   | <b>283</b>     | <b>342</b>   | <b>317</b>   | <b>434</b>   |
|              | Men 15-64          | 177  | 190                   | -12         | 164          | 190          | 164          | 215          | 160          | 194          | 155          | 224          | 156            | 199          | 146          | 233          |
|              | Women 15-64        | 135  | 186                   | -50**       | 125          | 146          | 165          | 207          | 121          | 149          | 158          | 214          | 118            | 153          | 150          | 221          |
|              | <b>Total 15-24</b> | <b>61</b>  | <b>84</b>             | <b>-23*</b> | <b>54</b>    | <b>69</b>    | <b>69</b>    | <b>100</b>   | <b>51</b>    | <b>71</b>    | <b>64</b>    | <b>105</b>   | <b>48</b>      | <b>74</b>    | <b>59</b>    | <b>110</b>   |
|              | Men 15-24          | 33   | 51                    | -17*        | 28           | 39           | 40           | 62           | 26           | 40           | 36           | 65           | 24             | 42           | 32           | 69           |
|              | Women 15-24        | 28   | 34                    | -6          | 23           | 33           | 23           | 44           | 21           | 35           | 20           | 47           | 19             | 37           | 16           | 51           |
|              | <b>Total 25-64</b> | <b>251</b>                                       | <b>291</b>            | <b>-39</b>  | <b>236</b>   | <b>266</b>   | <b>261</b>   | <b>321</b>   | <b>232</b>   | <b>271</b>   | <b>251</b>   | <b>330</b>   | <b>226</b>     | <b>277</b>   | <b>240</b>   | <b>341</b>   |
|              | Men 25-64          | 144  | 139                   | 5           | 132          | 156          | 115          | 162          | 129          | 159          | 108          | 170          | 124            | 164          | 100          | 178          |
| Women 25-64  | 107                | 152  | -45**                 | 98          | 117          | 134          | 170          | 95           | 119          | 128          | 176          | 92           | 123            | 121          | 183          |              |

\* 95% significance; \*\* 99% significance

## ABOUT STATBEL

Statbel, the Belgian statistical office, collects, produces and publishes objective and relevant figures on the Belgian economy, society and territory.

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