

August, 5th 2020

Working from home – Labour Force Survey ad hoc module
2nd quarter of 2020

Working from home due to the pandemic covered one million people

In the 2nd quarter of 2020, the employed population that reported having worked always or almost always from home in the reference week or in the three weeks before was estimated at 1,094.4 thousand people, which represented 23.1% of the total employed population. Of these, 998.5 thousand people (91.2%) indicated that the main reason for having worked at home was the COVID-19 pandemic.

Comparing the hours worked in the reference week, there was no big difference between working at home or in another place. In fact, those who were not absent from work and have worked in another place other than home have worked an average of 36 hours in that week and those who were not absent from work and have worked from home have worked 35 hours.

It was also observed that 1,038.0 thousand people used information and communication technologies to be able to work from home, which represented 21.9% of the total employed population and 94.8% of those who worked always or almost always at home in the reference period.

643.8 thousand employed persons did not work in their main job during the reference period, neither at home nor elsewhere, 76.3% (491.5 thousand) of which due to the COVID-19 pandemic.

1. Introduction

Statistics Portugal publishes the results of the Labour Force Survey module on “Working from home”.

In the 2nd quarter of 2020, a set of questions was added to the Labour Force Survey with the main purpose of estimating the number of employed persons working from home and, among these, those who did it in teleworking.

The target population of this module corresponds to the employed population, estimated at 4,731.2 thousand people.

The questions asked made it possible to meet three objectives:

1. Assess how many employed persons have worked in the reference period always or

almost always at home and if that occurred due to the pandemic.

2. Count how many, among the employed population who have always or almost always worked from home, have used information and communication technologies to carry out their work.
3. Find out how many employed persons absent from work in the four reference weeks did not work in the reference week due to the COVID-19 pandemic.

The analysis that follows focuses on responding to the three objectives. In the Excel tables attached are presented more detailed results, relating the questions of the module with several characterization variables

(NUTS II region, sex, age group, highest completed level of education, professional status, work duration regime, employment contract of employees, main activity (NACE-Rev.2), and occupation (ISCO-08)). This does not exhaust the richness of the module data when crossing with Labour Force Survey data. For a more in-depth exploration of the data collected, Statistics Portugal provides, upon request, tables with cross tabulation of variables, safeguarding the principle of statistical quality.

2. Main results

2.1. Working from home due to the pandemic

(Tables 1 to 3 of the attached file)

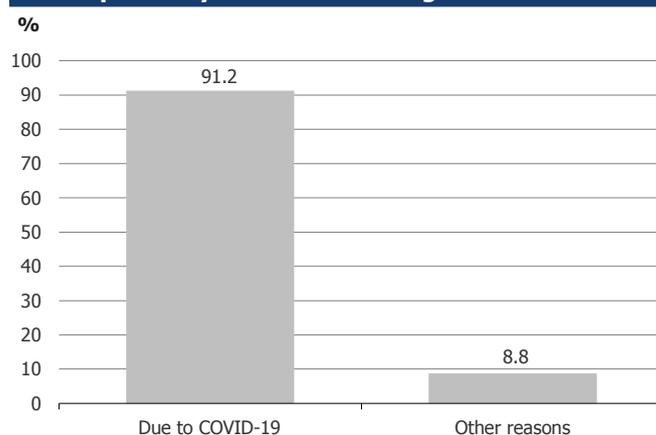
The employed population who has always or almost always worked at home in the reference week or in the three weeks before was estimated at 1,094.4 thousand people, representing 23.1% of the employed population.

The *Área Metropolitana de Lisboa* was the region with the highest share of employed people who have worked always or almost always at home during the four reference weeks (36.0%). This percentage was also higher among women (25.2%) than among men (21.1%) and among those with tertiary education (53.8%). By professional status, it was slightly higher among employees (23.4%) than among self-employed workers (22.0%). More than a quarter of workers in the services sector who mentioned having always or almost always worked at home work at the economic activity of education (27.5%), although this activity is only the third in terms of employed population in the tertiary

sector (12.5%). The professionals occupation, which represents 21.6% of the employed population in the 2nd quarter, was clearly the one in which the more workers have worked either always or almost always at home (56.7%).

To the 1,094.4 thousand people who reported having always or almost always worked at home in the reference week or in the three weeks before was asked whether the main reason for having worked from home was the COVID-19 pandemic and 91.2% (998.5 thousand) responded positively.

Figure 1: Employed population who has always or almost always worked from home in the reference period by reason of working from home



Among the latter, 55.0% were women, 42.9% lived in *Área Metropolitana de Lisboa*, 72.4% had a tertiary education degree, 90.0% were employees, 58.4% were professionals, and 29.4% of those working in the tertiary sector (87.2%) were working in the education activity.

It should also be noted that it was in the age group of those aged 45 and over that it was observed a greater proportion of people who worked always or almost always at home for reasons other than the COVID-19

pandemic (11.0%). Likewise, it was among those who had completed, at most, an education level corresponding to the first or second stages of basic education, and among those who worked part-time, that more people indicated having always or almost always worked at home for reasons other than the pandemic (38.8%, in both).

In the 2nd quarter of 2020, the population who worked always or almost always from home in the reference period has worked, on average, in the reference week, 33 hours per week, 8 hours more than the population who did not work from home or who has not always or almost always worked at home (25 hours on average).

The difference between these average weekly hours can be explained by both the steep increase in the employed population absent from work in the reference week, namely as a consequence of the simplified layoff regime, whose hours worked (zero) were accounted for in this indicator, and by the reduction of the daily working times that may have occurred in some companies.

Excluding from this analysis those who were absent from work in the reference week, it is observed that the population who has worked always or almost always from home in the reference period has worked, on average, 1 hour less than the population who did not work at home or who has not always or almost always worked from home (35 and 36 hours, respectively).

2.2 Use of information and communication technologies for working from home

(Tables 4 to 6.1 of the attached file)

To the employed population who mentioned to have always or almost always worked at home in the reference week and in the three weeks before it was asked if, to work from home, they needed to use a computer and/or smartphone, and to those who used at least one of these devices, it was asked to indicate the type of connection or communication they used: virtual private network (VPN), email, remote connection to a computer in the company, videoconference, web applications, extranet, shared folders in the cloud or any other type of information and communication technology.

Thus, it was found that 1,038.0 thousand people have used information and communication technologies (ICT) to work from home in the 2nd quarter of 2020, which represented 21.9% of the total employed population and 94.8% of those who have worked always or almost always at home in the reference period. Of these, 97.4% (972.3 thousand) did so due to the COVID-19 pandemic.

The use of ICT in the employed population that has worked always or almost always at home was more intense among those who lived in the *Área Metropolitana de Lisboa* (97.0%), among women (95.9%) and among those with tertiary education (98.4%). 97.4% of employees used these technologies, a share much higher than that observed for self-employed workers (81.2%). Almost all of the employed population in the education activity have also used these technologies to work from home (99.7%), in

contrast to those who have worked from home in the accommodation and food services activities (84.1%). Finally, it was among service and sales workers that a smaller use of ICT was used to work from home (89.3%).

This percentage was highest in *Algarve* (85.4%), *Região Autónoma da Madeira* (81.8%) and *Centro* region (80.6%), as well as among those who have the (upper) secondary and post-secondary non-tertiary education (83.0%) and are self-employed workers (91.3%). Among the economic activities that constitute the services sector, the accommodation and food services activities were the most affected (92.0%). Similarly, so were service and sales workers (81.7%).

Figure 2: Employed population who has always or almost always worked from home by use of information and communication technologies (ICT)

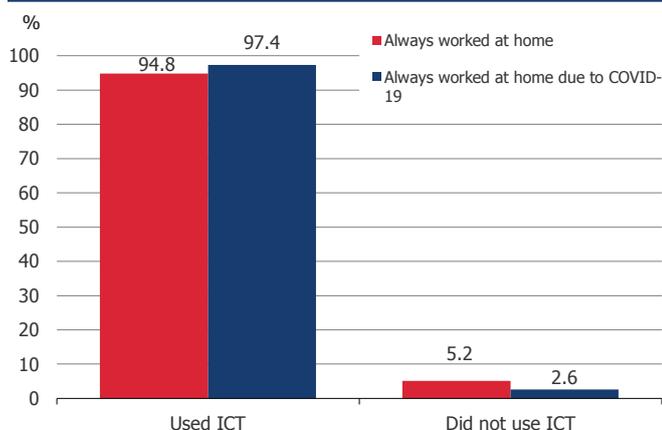
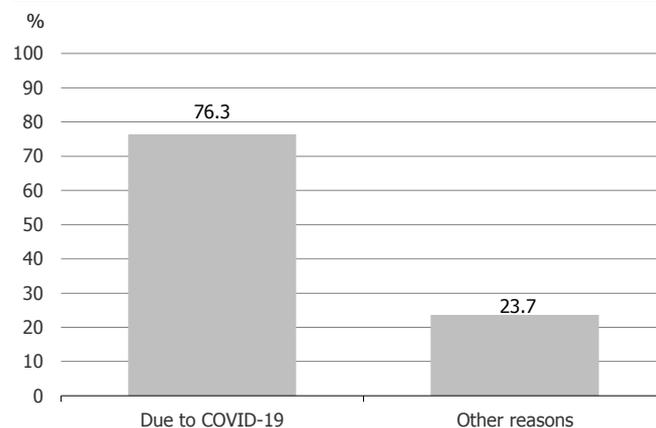


Figure 3: Employed population absent from work in the reference week by reason of absence



2.3 Absence to work due to the pandemic

(Tables 7 and 8 of the attached file)

In the 2nd quarter of 2020, there were 3,415.2 employed persons who indicated not having worked from home in the four reference weeks, 15.2% (612.2 thousand) less than in the previous quarter and 17.4% (719.4 thousand) less than in the same quarter of the previous year.

Of these, 643.8 thousand people (18.8%) did not work in their main job during the four weeks (they were absent). To these it was asked if the main reason for not having worked was the COVID-19 pandemic and 76.3% (491.5 thousand) said yes.

Employed population by work from home in the reference week and in the three weeks before Portugal - 2nd quarter 2020

| | Total | | Due to COVID-19 | |
|---|----------------|--------------|-----------------|-------------|
| | Thousands | % | Thousands | % |
| Employed population | 4 731.2 | 100.0 | | |
| Has worked always or almost always from home | 1 094.4 | 23.1 | 998.5 | 91.2 |
| Has not worked from home or not always or almost always at home | 3 636.8 | 76.9 | | |
| Equipment needed to work | | | | |
| Computer and smartphone | 733.1 | 67.0 | 682.1 | 68.3 |
| Only computer | 305.7 | 27.9 | 292.1 | 29.3 |
| Only smartphone | 15.5 | 1.4 | § | § |
| Neither | 39.1 | 3.6 | § | § |
| Use of ICT^(a) | | | | |
| Used ICT ^(b) | 1 038.0 | 94.8 | 972.3 | 97.4 |
| Did not use ICT or does not know ^(c) | 56.4 | 5.2 | 26.2 | 2.6 |
| Type of connection or communication used^(d) | | | | |
| Virtual private network (VPN) | | | | |
| Yes | 591.2 | 56.1 | 567.5 | 57.5 |
| No | 392.1 | 37.2 | 351.3 | 35.6 |
| Do not know | 71.0 | 6.7 | 68.3 | 6.9 |
| Email | | | | |
| Yes | 1 006.6 | 95.5 | 944.1 | 95.6 |
| No | 29.7 | 2.8 | 25.0 | 2.5 |
| Do not know | 18.1 | 1.7 | 18.1 | 1.8 |
| Remote connection to a computer in the company | | | | |
| Yes | 515.6 | 48.9 | 497.7 | 50.4 |
| No | 493.4 | 46.8 | 445.8 | 45.2 |
| Do not know | 45.4 | 4.3 | 43.7 | 4.4 |
| Videoconference | | | | |
| Yes | 851.2 | 80.7 | 812.5 | 82.3 |
| No | 182.3 | 17.3 | 153.7 | 15.6 |
| Do not know | 21.0 | 2.0 | 21.0 | 2.1 |
| Web applications, extranet | | | | |
| Yes | 514.5 | 48.8 | 487.8 | 49.4 |
| No | 452.2 | 42.9 | 412.9 | 41.8 |
| Do not know | 87.6 | 8.3 | 86.5 | 8.8 |
| Shared folders in the cloud | | | | |
| Yes | 568.9 | 54.0 | 541.2 | 54.8 |
| No | 415.1 | 39.4 | 377.8 | 38.3 |
| Do not know | 70.4 | 6.7 | 68.2 | 6.9 |
| Other type | | | | |
| Yes | 39.2 | 3.7 | 36.3 | 3.7 |
| No | 961.9 | 91.2 | 898.5 | 91.0 |
| Do not know | 53.2 | 5.1 | 52.3 | 5.3 |
| Employed population absent from work^(e) | 643.8 | 18.8 | 491.5 | 76.3 |

| | Total | Due to COVID-19 |
|--|-------------------------------------|-----------------|
| | Average weekly hours ^(g) | |
| Employed population worked hours | | |
| Has worked always or almost always from home ^(f) | 33 | 33 |
| Has not worked from home or not always or almost always at home ^(f) | 25 | |

Source: Statistics Portugal, Labour Force Survey ad hoc module "Working from home".

Conventional sign:

§ Extremely unreliable value

Notes:

(a) ICT - Information and communication technologies

(b) Corresponds to the employed population who has worked always or almost always from home in the reference period using computer and/or smartphone together with some type of information and communication technology: VPN, email, remote connection, videoconference, web applications, extranet, shared folders in the cloud or any other type of ICT.

(c) Corresponds to the employed population who has worked always or almost always from home in the reference period using computer and/or smartphone, but without using any type of ICT.

(d) Only asked to those who have used computer and/or smartphone.

(e) Employed population absent from work in the reference week and in the three weeks before.

(f) This variable reference period corresponds to the reference week and the three weekd before.

(g) The reference period of the average weekly hours actually worked corresponds to the reference week.

TECHNICAL NOTE

The main purpose of the Labour Force Survey is to characterise the population in terms of the labour market. It is a quarterly sample survey, addressed to families occupying the same dwelling in the national territory, which makes available quarterly and annual data.

Most of the characteristics observed in this survey report to the situation in one pre-defined week (from Monday to Sunday), known as *reference week*. The reference weeks are uniformly distributed throughout the quarters and years. The interviews usually take place in the week following the reference week.

The information is obtained directly, through computer-assisted interview, by using a mixed data collection mode: the initial interview is done face-to-face by an interviewer visiting the household and the other five interviews are done by telephone, if certain requirements are met.

The Labour Force Survey methodological document is available (only in Portuguese) at:

<http://smi.ine.pt/DocumentacaoMetodologica/Detalhes/1362>

Module “Working from home”

This module of Portuguese origin corresponds to a thematic survey, of small dimension, on the impact of COVID-19 pandemic in the labour market dynamics, namely on the evolution of working from home following the measures to contain the pandemic. The questions of this survey are intended to supplement the information gathered from the core questionnaire of the Labour Force Survey and are meant primarily to obtain more detailed information on this specific topic that will be used to define and/or monitor specifically national and European policy initiatives. Given this goal, the module will be held each quarter, as long as it is deemed necessary and there is interest in the topic.

The module is performed together with Labour Force Survey and is directed to the resident population aged 15 and over throughout the national territory.

The extrapolation of the results, such as in the Labour Force Survey, is made from a regional weights system, determined from independent population estimates. These weights are a function of the following variables: NUTS II region by sex and five-year age groups and also NUTS III region (or aggregations) by sex or large age groups.

Employed concept: person aged 15 years old or over whom, during the reference period, was in one of the following situations:

- had worked for at least one hour for a wage or salary, in cash or in kind;
- had a formal attachment to his/her job but was temporarily not at work;
- had an enterprise but was temporarily not at work for any specific reason;
- was in early retirement but working in the reference period.

Published data were calibrated by using the population estimates calculated from the final results of Census 2011.

Due to rounding, the totals in tables do not always match the sum of parts.