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IMPACT OF TELEWORKING ON THE LABOR DAY IN SPAIN

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Abstract: The year 2020 has marked a turning point in the application of teleworking in our country. Although it has not been one of the most prodigal in this matter, almost 19% of those employed teleworked in the second quarter of 2020. The feeling of having spent many more hours than the established ones is common among teleworkers to carry out this activity in their homes. It is also common among employers that their employees spend less time working than they must when they are out of regular visual supervision.

The data from the Active Population Survey include the variables of overtime worked in the last month, afternoons, nights, Saturdays and Sundays worked outside normal hours in this same period, as well as reasons that may have led to working more or fewer hours than usual in the last month, such as special Christmas or summer days, flexible hours, employment regulation files, etc.

Analysis of the data shows us that there is (has been) a certain tendency to work more hours than usual when teleworking, lengthening working hours in the afternoons especially, and not so much on weekends (Saturdays and/or Sundays), or at night. Flexible schedules and teleworking have caused more hours to be worked than usual, while employment regulation files, as well as special shifts (reduced, summer, etc.) have made it easier for teleworkers to work less than usual; thus probably saving the impact of the reduction in activity on employment.

Keywords: Telecommuting; Productivity; Workday; Extraordinary hours; Digital disconnection.

INTRODUCTION

The restrictions on activity and mobility imposed in Spain due to the pandemic situation have led to abrupt changes in working conditions, among other things. For example, according to data from the Active

Population Survey (I.N.E.), teleworking during 2020 reached a maximum of 19% of the Spanish active population, although with strong quarterly variations.

In 2019, teleworking in our country affected only 8% of workers who regularly carried out their work remotely, and only 10% did so occasionally Milasi, S., I. González-Vázquez and E. Fernández-Macías (2021), with very moderate growth during previous years, and very far from the figures seen in other northern European countries, although of course well below potential.

During the second quarter of 2020, the percentage of teleworkers increased rapidly due to the effect of legal restrictions to deal with the health situation, reaching 19% of the employed active population, to later rise to 14 and 15% respectively in the following quarters. This downward swing reflects a certain inertia to recover the situation prior to the pandemic.

There is a widespread opinion that workers who carry out their work remotely (mostly from their private homes) spend more hours at work than those who carry out their work from the office, due to difficulties in separating productive / reproductive spaces, lack of discipline in the use of time, or simply because the pressure increases due to the greater availability required by the employer.

STATE OF AFFAIRS

Productivity is one of the central aspects, from the employer's point of view, when considering the implementation of teleworking. Doubts are often established in relation to whether or not the worker will be complying with the contracted work hours, while from the employee's point of view many doubts always arise about how to separate work time from time dedicated to other activities when the space is the same.

Kelliher and Anderson, 2011 report greater effort at work among remote workers.

Feldstead and Henseke (2017) suggest that a typical day among teleworkers is longer, as well as that the intensity of each hour worked is greater and that more effort is expended voluntarily. Felstead (2022), analyzing data from the Eurofound survey, 2021, which explores the working conditions of European workers, reveals that working from home has lengthened the working day and made it more intense, especially since the pandemic.

In public administrations (Belzunegui et al., 2022), during the pandemic and as a consequence of teleworking, when asked by public employees with personnel under their charge about the amount of work carried out by people, they think that it has remained the same, 42% while they say that it has increased a lot or a lot, another 41%. Among the middle managers with teams under their charge, there is a difference of opinion, but only 47% think that productivity has increased a lot or a lot. On the other hand, 66.3% of the employees interviewed nevertheless admit having worked overtime without meaning to and 36.3% have had difficulty finishing their workday.

There are many employers who are not very clear that teleworking has brought with it greater productivity, or even greater dedication of hours, therefore, in this analysis we explore what is true in the impression that employees who have teleworked during the COVID19 restrictions in 2020 and 2021 have, that they worked more hours than those who did not telework.

METHODOLOGY

For this analysis, the active population survey carried out periodically by the National Institute of Statistics has been taken as a reference. We have used the exploitation of the data from said survey corresponding to the years 2019, 2020 and 2021. For the year 2019 the data of the annual total will be

considered, while for the years 2020 and 2021 the quarterly data have been considered.

The reasons why different time periods have been considered are the following: On the one hand, because our interest is focused on analyzing the evolution of the period referred to by the pandemic, and on the other, because quarterly data is not available before March 2020, when the National Institute of Statistics introduces this question in the sample that is analyzed quarterly.

In order to answer the research question, we have accumulated both those who teleworked at least one day per week, as well as those others who did so more frequently, therefore considering those who have teleworked, regardless of the intensity with which they have done so.

Lastly, the calculations expressed in the Tables have not taken into account those interviewees who have declared “don’t know” in any of the response categories. Especially in the case of not knowing if you have teleworked or not. We are aware that the data is altered in some way in the proportions, but it solves the dilemma of what we must understand by “does not know” if he has teleworked or not, which can introduce confusion in our analysis.

We understand that on many occasions the answer is not easy. In the example of flexible hours, it will not be easy to determine what is the time from which to establish an extra hour, particularly because in certain sectors of activity it is not usual for these to be counted or paid separately. This introduces some inconsistencies with previously published data, but allows for better identification of observed movements in the data.

RESULTS

The feeling among those who telework that they dedicate more hours to work than if they carried out this work in an office is very common. The absence of differentiating

physical limits and flexible hours contribute to a large extent to this common feeling. Although it is difficult to distinguish whether this is due to the special circumstances imposed by the pandemic, to the fact that there is indeed a greater dedication to work when it is carried out at home, or that there is a distorted perception when the domestic space is used for work, the data from the Active Population Survey allow us to see the situation among workers on this issue.

The active population survey collects some questions related to this issue, such as whether the worker has worked overtime, whether he has worked an afternoon, a night, a Saturday or a Sunday outside of his normal working day. It also collects questions about whether he has enjoyed a special day (reduced or summer), leave days or holidays. It must be borne in mind that these are opinion data, and therefore are subject in some cases to the perception and memory of the interviewee himself.

Of the slightly more than 16.6 million wage earners registered by the National Statistics Institute in 2019, barely 900,000 declare or admit to having worked any overtime. Barely 700,000 claim to have teleworked either occasionally or more than half the days of the week. In short, in 2019 only 0.3% of wage earners acknowledged having worked overtime and teleworking. The number of workers who claim to have worked overtime is in absolute terms higher among those who have not teleworked for the entire period considered.

In the first quarter of 2020 two events occurred in parallel, on the one hand, the percentage of employees who telework and who admit to working overtime is multiplied by four, while the percentage of those who do not telework and who admit to having worked overtime is almost divided by two. The data most likely reflect the effect of the general drop

in activity (especially among those who do not telework), the increase in teleworking and the greater effort in hours among those who do so. Due to such low figures, it is difficult to find statistically significant relationships in this sense, although a simple F test shows a certain tendency towards relevant relationships ($p=.079$).

The activity, although it shows a slow recovery, is not fully reflected in the overtime data. The percentage of workers who do not telework and who claim to work overtime does not recover the data shown in 2019 (5.18%) at any other time in the observed period.

However, it could also be the case that the perception of doing overtime while teleworking is less in an environment where overtime is not paid, or that there is not even awareness of overtime due to labor flexibility (Belzunegui, 2002). To answer this question, we need to observe the behavior within each of the groups, those who have teleworked and those who have not.

The percentage of workers who have worked overtime based on each of these groups (have teleworked and have not teleworked), behaves very differently. Among those who have teleworked, the number of people who report having worked overtime is greater, in some cases more than double, than among those who have not teleworked.

This percentage is higher from the beginning, in 2019, a distance that is reinforced during the period that we observe, most likely due to the effect of the decrease in the demand for activity among those who have not teleworked. In the series we can also observe the effect of seasonality both in the third quarter of 2020 and in that of 2021.

I WORK ON WEEKENDS

Almost four out of ten employed workers (38%) worked on a Saturday in 2019, but only 3.6% did so remotely. Despite the changes

People who have worked over-time	2019	2020			2021			
		T2	T3	T4	T1	T2	T3	T4
People who have teleworked	0,3	1,3	0,7	1,0	1,0	1,0	0,6	0,7
People who have not teleworked	5,2	2,8	3,4	3,7	3,6	4,0	3,4	4,1
TOTAL	4,3	17,4	11,91	12,42	14,0	11,9	10,0	10,7

Table 1: Percentage of wage earners who claim to have worked overtime.

Source: Active Population Survey.

People who have worked over-time	2019 (b) ¹	2020			2021			
		T2 (a)	T3	T4	T1	T2	T3	T4
People who have teleworked	7,6	7,2	5,8	8,1	7,2	8,0	6,1	7,1
People who have not teleworked	5,4	3,4	3,8	4,3	4,5	3,8	3,8	4,6

Table 2: Percentage of teleworkers who worked overtime.

Source: Active Population Survey

People who have worked on a Saturday	2019	2020			2021			
		T2	T3	T4	T1	T2	T3	T4
People who have teleworked	42,1	20,5	24,7	25,8	23,8	27,1	25,3	26,9
People who have not teleworked	37,7	30,5	36,7	36,5	35,4	36,6	37,0	36,2

Table 3: Percentage of employed people who telework among those who worked on a Saturday

Source: Active Population Survey

People who have worked on a Sunday	2019	2020			2021			
		T2	T3	T4	T1	T2	T3	T4
People who have teleworked	24,0	12,6	14,9	15,4	14,0	16,3	15,8	16,7
People who have not teleworked	23,1	17,2	22,3	21,6	20,4	21,5	22,6	21,8

Table 4: Percentage of employed people who telework among those who worked on a Sunday.

Source: Active Population Survey

People who have worked some afternoon	2019	2020			2021			
		T2	T3	T4	T1	T2	T3	T4
People who have notteleworked	47,7	31,9	32,1	31,8	30,6	34,2	31,4	32,9
People who have not teleworked	32,3	24,6	30,5	29,5	27,1	29,5	30,5	30,5

Table 5: Busy who worked one afternoon

Source: Active Population Survey

People who have worked some night	2019	2020			2021			
		T2	T3	T4	T1	T2	T3	T4
People who have teleworked	11,9	6,3	7,1	6,4	5,7	6,0	6,8	7,5
People who have not teleworked	13,2	10,1	12,5	10,9	9,7	10,5	12,1	11,9

Table 6: Busy who worked one night

Source: Active Population Survey

1. (P=0,051)

observed in the 2020 and 2021 period, very significant increases are observed in the percentage of teleworkers who claim to have worked on a Saturday. The percentage of employed persons who worked in person on a Saturday is significantly higher than that of those who did so remotely ($F=7.90$; $P=.01$), and shows a relevant trend to be significantly higher among those who worked on a Sunday ($F=3.40$; $P=.06$).

The pandemic brought confinement, and a reduction in activity that is shown precisely in the number of employed people who worked on Saturdays, particularly among those who did not telework. The reduction in activity particularly affects this group since activities that cannot be “telework” are mentioned among them.

Despite the fact that the number of teleworkers who claim to have worked on a Saturday is small, it is striking that almost half of those who teleworked in 2019 also did so on a Saturday, just over a third (31.2%) including several Saturdays in the same month. This percentage falls drastically in the first quarter of 2020 and as far as we can see, it has not returned to its original situation.

On the other hand, one in five employed people worked at least one Sunday, but only 2% also did so remotely, a figure that has hardly changed during the pandemic period. The impact of the reduction in activity can only be intuited again among those who worked on a Sunday during one of the months of the strictest confinement that corresponds to the measurement of the second quarter of 2020, especially among those who worked in person; percentage that decreased by seven percentage points.

Just as we observed with the number of actively employed people who worked on a Saturday, approximately the same number of employed people teleworked on a Sunday, but nevertheless the pandemic has reduced the

number of teleworkers who dedicated at least one Sunday a month to work, even more than that of those profiles who did not telework.

It is important at this point to take into account again the profile of the most frequent teleworkers in this period, in order to understand by their occupations, what can explain this significant drop in activity on weekends.

Teleworking has not been applied equally in all sectors of activity or in all professional groups, being more frequent among office jobs, and at higher professional levels. The profile of the teleworker observed today is a person with secondary or higher education, a permanent employee of a private company, with a scientific, intellectual, technical or professional occupation, and employed mainly in one of the following activity sectors: information and communication, education, science, technology, finance and/or insurance. Working in sectors of activity related to science and technology, or being busy in technical or scientific work, increases the chances of teleworking.

WORK WEEKDAYS AFTERNOONS OR NIGHTS

Contrary to what we have found in relation to work on weekends, the percentage of employed persons who teleworked one afternoon, being very low at the beginning of the period (4.0%), increased with the confinement and remained at slightly higher figures than at the beginning. The percentage of teleworkers who occupy their afternoons with work, beyond the usual day, is significantly higher than that of those who do not telework in the entire period analyzed ($F=5.45$; $P=.019$). Just the opposite occurs in the case of working one night, which seems to tend to be less frequent among those who do not telework, although the size of the sample does not allow statistically relevant

relationships to be drawn.

Almost half of those who teleworked in 2019 worked some afternoon, compared to only one in three of those who did not telework. Although the starting data were very different, and the drop in percentage points of those who teleworked at least occasionally in the afternoon doubles that of non-teleworkers (15.8 versus 7.7 percentage points), we did not observe relevant differences between the two groups in the rest of the period.

Only one in 10 employed people works at least one night a month. The percentage of them who telework is practically nil. Once again, we observe in the series the impact of the fall in industrial activity during the second quarter of 2020, after which the figures have been recovering their starting position.

REASONS FOR WORKING FEWER HOURS THAN USUAL

Throughout this analysis of the active population survey, it has been possible to observe the impact that mobility restrictions have had on occupation and employment, with a reduction in the practice of overtime, at work on weekends, especially on Saturdays, and at work in the afternoons or nights.

From the employer's point of view, teleworking has served to reduce the number of hours that would have been lost due to partial stoppages or due to the application of employment regulation files, as can be seen in the data corresponding to the year 2020, the only ones available.

Teleworkers claim to have worked a few hours less due to partial stoppages, especially in the second quarter of 2020, and due to employment regulation files, although in this case they are concentrated only during the time of the strictest confinement.

Despite the partial stoppages, the employment regulation files and the files of temporary suspension of the contract or

reduction of working hours for economic, technical, organizational or production reasons (ERTEs ETOP), in general terms the percentage of those who work fewer hours than what must be usual is higher among those who have not teleworked for different reasons, festivities, vacations, days off or special days,

Slightly more than four out of 10 employees, not teleworkers, reported that in 2019 they had worked fewer hours than usual to enjoy holidays, while only one out of three employees who teleworked mentioned this matter. The situation is reversed when we talk about vacation days, permits or special days such as summer and other variable hours; being more frequent among teleworkers.

The data on enjoying fewer days of vacation or leave than usual are also higher among those who did not telework in the last month prior to the survey. The percentage of those who did not telework and enjoy a summer day or flexible hours is also higher. For this reason, one might think that the working conditions of those who do not telework are more advantageous.

However, when we analyze each of the groups separately, although there are more who, having not teleworked, claim to have worked fewer hours to enjoy holidays, there are considerably fewer who have not teleworked and have worked fewer hours to enjoy vacation days, paid leave, variable or summer hours, and other advantageous working conditions.

REASONS FOR WORKING MORE HOURS THAN USUAL

There are hardly any wage earners who have teleworked and who declare that they have worked more hours for having a flexible schedule or for having done more overtime, compared to a percentage, sometimes high (up to one in five), among those who have not teleworked. To analyze this situation we

You worked fewer hours than usual due to:	People who have teleworked			People who have not teleworked		
	T2	T3	T4	T2	T3	T4
Partial stoppages	27,8	10,5	4,9	27,3	7,6	4,5
Employment regulation files	10,3	8,7	4,0	9,3	10,9	6,1

Table 7: Percentage of wage earners who worked fewer hours than usual, according to reasons.

Source: Active Population Survey, 2020.

You worked fewer hours than usual due to:	People who have teleworked				People who have not teleworked			
	2.019	2020			2019	2020		
		T2	T3	T4		T2	T3	T4
Party days	30,4	20,2	3,9	47,3	43,8	23,3	5,3	46,5
Vacation or furlough days	11,7	2,5	12,4	4,3	6,2	2,5	8,3	4,2
Special summer days, variable hours or similar	10,8	4,7	28,1	4,5	6,6	5,6	17,9	5,0

Table 8: Percentage of wage earners who worked fewer hours than usual, according to reasons.

Source: Active Population Survey

You worked more hours than usual because of:	People who have teleworked				People who have notteleworked			
	2.019	2020			2019	2020		
		T2	T3	T4		T2	T3	T4
For flexible hours	11,9	7,5	9,2	10,3	7,7	5,5	10,3	6,6
For overtime	11,5	5,7	11,1	12,6	20,7	9,6	18,8	11,9

Table 9: Percentage of wage earners who worked more hours than usual, by reason.

Source: Active Population Survey

are going to take as a base each of the groups, teleworkers and non-teleworkers.

Before the pandemic, in 2019, 12% of teleworkers reported having worked more hours due to having a flexible schedule, where we only found 8% of non-teleworkers. When the confinement took place, those who teleworked reported working more hours by having a flexible schedule, however, when this strict restriction was relaxed, towards the summer of 2020, the number of those who worked more hours due to having a flexible face-to-face schedule is greater, to resume the starting situation towards the end of 2020.

One in five employees who have not teleworked reported having worked overtime in 2020, almost ten points more than among those who had teleworked, and these data will remain higher throughout the period. The number of employed telecommuting who have worked more due to having worked overtime shows a strong tendency to be significant, statistically speaking ($P=.051$).

Although this particular could be contradictory in relation to the first of the points analyzed, a linear reading could be misleading. It must be considered that teleworking occurs more in some occupations than in others. We must also take into account that precisely in these occupations it is not customary to pay overtime and therefore would not be rigorously controlled. A flexible schedule, in itself, and due to its variability, would make it more difficult to control the real number of hours dedicated to work (Belzunegui, 2002).

CONCLUSIONS AND DISCUSSION

Although the number of teleworkers has practically doubled, teleworking in Spain has not finally taken off. However, in the last two years, as a result of the measures implemented to control the spread of the virus, the year

2020 marks a turning point in the expansion of teleworking in our country.

Very reliable analyzes have been carried out in order to determine the ability of teleworking to be applied to different professional activities (Dingel and Neiman 2020; Sostero, M. et alts. 2020), models that have explained very well what the path of teleworking could be in the different economic sectors both nationally and internationally. These figures would potentially reach 36% of the active population in our country.

Teleworking has not been applied equally in all sectors of activity or in all professional groups, being more frequent among office jobs, and corresponding to higher professional levels.

Even so, these readings do not provide an explanation for the reasons why, even though teleworking may have reached high levels of application among workers in multiple sectors, this has not happened.

Many answers have been considered, such as the presentist culture among managers and middle managers in Spain, the lower productivity of work when it is carried out outside the office, the distraction that conciliation entails, or the lesser dedication of workers when they are out of the control of visual supervision. In the background issues related to a decline in productivity in the activity of companies.

Trends to significant relationships have been identified between teleworking and doing more overtime, especially lengthening afternoon shifts beyond normal hours. The percentage of teleworkers who occupy their afternoons with work, under these conditions, is significantly higher than that of those who do not telework in the entire period analysed.

It has not been possible to find evidence of greater dedication to paid work on Saturdays, Sunday afternoons and/or nights among teleworkers than among the rest of the

employed during the period of restrictions due to the pandemic.

From the employer's point of view, as can be seen in the data corresponding to the year 2020, teleworking has served to reduce the number of hours that would have been lost due to partial stoppages or due to the application of employment regulation files, probably to a greater extent than other measures taken to maintain employment such as ERTE ETOP, and of course at a much lower social cost.

In the context of the social debate that caused the change in the framework of labor relations, the LOPDGDD (3/2018) gained renewed impetus, transposing the General Data Protection Regulation into the Spanish legal system from community regulations. This matter was in turn reinforced by the Teleworking Law (10/2021) which guaranteed the right to privacy and digital disconnection, particularly in the context of teleworking. Thus, the public powers came out in defense of teleworkers who could feel under high pressure due to changes in the protocols and supervision procedures. Even so, and given the moderation observed in the data regarding overtime in 2020, a situation that is reached with the normalization of teleworking, its impact in the medium-long term remains to be seen.

Another question is opened below that would lead us to a detailed analysis of the impact of Covid-19 on productivity, since this greater number of declared work hours must lead to an increase in the productivity of employees and companies.

The general effects of Covid-19 on productivity however mask some countervailing forces. Companies can anticipate a large reduction in productivity, partly because the measures to contain Covid-19 were expected to increase intermediate costs and decide on it, for example. This negative intra-firm effect is partially offset by a positive intermediate effect, as low-productivity sectors, and less productive firms among them, are disproportionately affected and consequently make a smaller contribution to the economy. The size of these two offsetting effects is estimated to be larger in earlier quarters, but both effects are expected to become smaller over time.

According to recent research carried out in the UK (Felstead and Reuschke, 2021) its results suggest that Covid-19 will reduce total factor productivity in the UK private sector by up to 5% in Q4 2020 and by around 1% in 2022 and beyond. The effects of Covid-19 on hourly labor productivity are estimated to be less negative than those on total factor productivity because hours worked decline more than capital, weighted by elasticity, and labor inputs.

The data that we have analyzed in this text have a dynamic character, especially in a phenomenon such as teleworking that is in the "collective bargaining" phase, however, the current situation points to a change in the labor model that requires much more applied research that has a particular impact on this point.

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