

Reducing the workweek to 32 hours? Evidence from surveys of managers and workers

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Abstract

This study discusses the advantages and limitations of a reduction in work time to 32 hours per week. Through the analysis of a survey completed by 371 managers and one completed by 1,508 workers, we identify five key areas for discussion. First, the results show that for 60% of companies the reduction would have no negative effects, while, for the rest, there could be negative effects if the reduction in working hours is not accompanied by the necessary organisational, technological and human capital changes. Second, for correct implementation, sectoral and business learning about these changes is needed. Third, there is a clear, transversal social demand to work fewer hours. Fourth, employment would likely increase, mainly due to the growth of sectors such as leisure, education and tourism. Lastly, to strengthen the possible effects on employment and the reduction in harmful emissions, the change in the working week would need to be accompanied by training policies and the promotion of public transport. To avoid the risk that the reduction in working hours would increase the gender gap in reproductive tasks, the policy should be complemented with cultural change regarding gender roles.

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1 Executive Summary

1. The objective of this study is to understand the advantages and limitations of a reduction in working hours to 32 hours per week while maintaining the same salary. The results and recommendations of this study are based on the analysis of a survey completed by 371 company managers, and one completed by 1,508 workers, and a review of related literature. The main conclusions are as follows.
2. 31% of companies consider that reducing work time would increase the number of tasks their workers perform weekly. Another 29% think that the number of tasks would remain unchanged. Therefore, it is anticipated that changes in work organisation and the reduction of non-productive hours in paid work would improve the health and motivation of the workforce, increasing productivity.
3. However, 40% of companies do think that the number of tasks completed by their employees would be less. Consequently, a correct political implementation of the change would help these companies understand which organisational transformations are needed to increase productivity to compensate for the reduction in working hours. In addition, these companies should also see benefits from an increased productivity due to the physiological, motivational, human capital and creativity improvements that are expected from dedicating fewer hours to paid work.
4. The survey results also suggest that a reduction in work time would increase productivity through:
 - Organisational improvements: reducing work time can catalyse organisational and technological changes that increase productivity and offset the increase in unit labour costs. The historical evidence is consistent with this and the survey results also suggest the same.
 - Physiological and motivational improvements: more rested workers with greater ability to concentrate are more productive. However, it is important to bear in mind that work pressure can increase and negatively affect workers' health. Therefore, organisational changes must be sought that minimise this risk.

- Improvements in human capital and creativity: 26.3% of workers would dedicate part of their free time to training, which is expected to improve their work capabilities. Likewise, a more relaxed population can be more creative.
5. There is a social demand to reduce work time to 32 hours per week. 71% of workers consider that limiting the working week to 32 hours would help them a lot to improve work-life balance. Another 26% also think it would help them. Furthermore, this demand is transversal by gender, carers of a dependent person and socioeconomic level. The reduction would particularly benefit between 28.9-37.2% of workers who suffer from a serious lack of time to spend with their family, or to take care of their physical and mental health, to rest or to focus on personal goals.
 6. Preferences on how to organise a working week are similar between employers and workers. Both prefer to work one day less a week compared to other options, such as maintaining 5 working days but shorter hours, or having more holidays. For workers, the results are very similar when we disaggregate by gender or by whether they are carers of a dependent person. In the case of employers, these express a clear preference for the additional day off not to be the same for all workers.
 7. The policy of reducing work time can increase employment, mainly with the increase in demand towards sectors related to leisure, education, sports or tourism, which are some examples of activities to which workers would dedicate their additional free time. Consequently, the policy would drive structural changes in economic activity.
 8. 78% of companies consider that to maintain production volume it would be necessary to employ more personnel. Therefore, the policy can increase employment independently of the structural change it would cause.
 9. Evidence suggests that without changes in gender roles in reproductive work, the reduction in work time could increase the gender gap with respect to domestic and care work. More specifically, women or people with dependents say that, if they had additional free time, they would dedicate more time to doing housework and caregiving.
 10. Harmful emissions linked to transport would likely fall, for two reasons:

- Emissions from travelling to the workplace would decrease and, almost certainly, activities linked to additional free time would involve fewer trips.
 - Having more free time makes public transport options more attractive, leading to a reduction in pollution through less car use.
11. The limitation of working hours must be applied to the entire economy. To do this, the implementation of the change must take into account:
- Sectoral learning to understand what organisational changes are feasible in each sector, with special emphasis on small and medium-sized companies. To achieve this, pilot studies in companies from all sectors could serve to extract generalisable examples of good practices. Likewise, dialogue between social actors in each sector is essential to promote the dissemination and analysis of this knowledge.
 - To ensure that the change reaches all companies, the role of a union proxy should be created. In other words, a worker who receives the union's mandate to bargain the necessary organisational changes.
 - A gradual nature of change must be considered that allows both sectoral and business learning and transformation to occur.
12. Lastly, reducing working hours has the potential to generate virtuous circles, such as lowering unemployment, reducing emissions, or improving the gender distribution of reproductive work. However, to achieve these changes, action is needed in the field of educational policies, promotion of public transport, etc., and cultural changes regarding gender roles or the ecological limits of the planet.

2 Introduction

The debate on the reduction of work time has returned to the forefront of public discussion in many countries. For example, in Spain, the United States, the United Kingdom, Ireland, Australia and New Zealand there have been policies and initiatives to reduce the working week to 32 hours (K. Lewis, 2023; Schor et al., 2022, 2023). However, there are two sides to this discussion. On

the one hand, there are those in favour of reducing working hours, who consider that it can have multiple benefits on, for example, productivity, health, work-life balance, distribution of work and sustainability (Gomes, 2021; Sanchis, 2022). On the other hand, there are those who are against the idea, arguing that production costs would increase, companies would lose competitiveness, and economic activity would decrease and unemployment could rise.¹

The objective of this study is to contribute to the debate through the analysis of a survey completed by 371 managers and one completed by 1,508 workers in the Valencian Community. The surveys include questions about productivity, work organisation, work-life balance, use of time, etc. We also collected information about the characteristics of each company or employee. An advantage of this approach is that it provides a representative profile of the productive structure of the Valencian Community, its companies and its workers, and what they think about the possibility of working 32 hours. In this sense, the sample on which the results are based does not suffer from self-selection problems, as in the case of previous evaluations (Cuello, 2023). Consequently, the conclusions of this report should be more generalisable. However, a disadvantage is that both companies and workers may not have given much thought to how they would adapt to the reality of a 32-hour working week. Therefore, it is plausible that their responses may under or overestimate the possible outcomes.

The summary of the main conclusions was presented in section 1. The rest of the study is structured as follows. In section 3 we present the methodology and data. In section 4 the Spanish context is outlined, followed by analysis of the surveys. In sections 5 and 6 we discuss how reducing the working week could affect production and productivity. In section 7 we show that there is a clear social demand to reduce the working week. Sections 8, 9 and 10 discuss the effects on employment, work-life balance and emissions derived from transport. In section 11 we reflect on the correct implementation of a reduction in work time to 32 hours per week. Finally, in section 12 we present the conclusions.

¹For example, the response of employers to the announcement of the reduction of work time to 37.5 hours per week in Spain was critical of the decision. See: https://www.eldiario.es/economia/empresarios-revuelven-psoe-sumar-reduccion-jornada-laboral_1_10625320.html

3 Methodology and Data

The data on which this study is based were obtained through a survey aimed at company managers and one aimed at workers. In interviewing the former, the objective was to obtain information on the effect of a reduction in work time from a business point of view. We asked managers whether they thought it possible to reduce working hours without the number of tasks performed by workers being negatively affected. We also asked their views on how the reduction in work time should be organised, i.e., as four days a week, or five shorter days. The survey aimed at managers was structured around four large topic areas: characteristics of the companies, work time in the company, business organisation and productivity. The field work was carried out between July 6 and July 21, 2023, and a total of 371 managers were surveyed by telephone.² The sample type is a stratified random sample by sector and number of workers. The sampling error is $\pm 5.19\%$ with a confidence level of 95% in the worst case of $p = q = 50\%$. The questions asked can be found in the annex “Encuesta a directivos”.

In the case of the workers, the objective was to find out what workers thought about reducing working hours while maintaining the same salary, i.e., whether they were interested in reducing their work time, and what they would do with their additional free time. The survey of workers was structured around 5 main topic areas: characteristics of the workers, work time, work-life balance, business organisation and productivity, and mobility. The field work took place between September 27 and October 3, 2023, and a total of 1,508 workers completed the survey, online.³ The sample type is a stratified random sample by sector, age and gender. The sampling error is $\pm 2.58\%$ with a reliability level of 95% in the most unfavourable case of $p = q = 50\%$. The questions asked can also be found in the annex “Encuesta a trabajadores”.

To complement the survey data, we interviewed a number of social agents who would be involved in the political development of a reduction in work time. Specifically, we spoke with two representatives of the Business Confederation of the Valencian Community. We also interviewed a representative of CCOO and another of UGT, the two unions with the greatest representation. Finally, we spoke with a worker from LABORA, the Public Employment and Training Service of the Valencian Community.

²Specifically, the survey methodology was *Computer Assisted Telephone Interviewing*

³In this case, the survey methodology used was *Computer Assisted Web Interviewing*

Table 1 shows the descriptive statistics of the companies that were surveyed. Likewise, Tables 2-4 show the characteristics of the workers who took part in the survey.

Table 1: Descriptive statistics from the survey completed by managers

Variable	Observations	Average	Standard Deviation	Minimum	Maximum
% Alicante	371	39.4	48.9	0	100
% Castellón	371	21.0	40.8	0	100
% Valencia	371	39.6	49.0	0	100
% Trade	371	25.6	43.7	0	100
% Construction	371	13.2	33.9	0	100
% Hospitality	371	12.9	33.6	0	100
% Industry	371	14.0	34.8	0	100
% Services	371	28.8	45.4	0	100
% Transport	371	5.4	22.6	0	100
% 1-5 employees	371	46.4	49.9	0	100
% 6-9 employees	371	23.2	42.3	0	100
% 10-49 employees	371	25.1	43.4	0	100
% 50 or more employees	371	5.4	22.6	0	100
% in ascending phase	371	58.8	49.3	0	100
% in descending phase	371	16.4	37.1	0	100
% stagnant	371	24.8	43.2	0	100
% majority staff work non-split working day	371	15.4	36.1	0	100
% majority staff work full day with break	371	19.7	39.8	0	100
% all staff work non-split working day	371	27.0	44.4	0	100
% all staff work full day with break	371	38.0	48.6	0	100
% majority of staff work full time	371	32.1	46.7	0	100
% majority staff work part time	371	5.4	22.6	0	100
% all staff work full time	371	56.9	49.6	0	100
% all staff work part time	371	5.7	23.1	0	100
% companies which offer extra hours	371	18.6	39.0	0	100
% companies which have shift work	371	31.5	46.5	0	100
% where 0-20% staff are men	371	12.7	33.3	0	100
% where 20-40% staff are men	371	15.4	36.1	0	100
% where 40-60% staff are men	371	19.9	40.0	0	100
% where 60-80% staff are men	371	17.8	38.3	0	100
% where 80-100% staff are men	371	34.2	47.5	0	100
Age of the company	371	28.0	19.6	1	150

Notes: The table shows the characteristics of the companies that were surveyed in the “Encuesta de directivos”.

The survey completed by managers showed that 40% work in companies in the province of Valencia, 39% in Alicante and another 21% in Castellon. 29% are in the service sector, 26% in commerce, 14% in industry and 13% in both construction and hospitality. The majority of managers consider that the company is in an ascending phase (59%). Another 25% think that the

company is stagnant and a minority that the company is in decline (16%). Most companies are small and medium-sized in terms of number of workers. 46% have between 1 and 5 employees, 23% between 6 and 9, and 25% employ between 10 and 49 people. Finally, 5% are companies with more than 50 workers. 52% of companies are quite or very masculinised (more than 60% of the workforce is male). In terms of working day, most companies have all, or most, of the staff working a split day (38% and 20%, respectively) and all, or most, working full-time (57% and 32%, respectively). 19% of companies use overtime and 32% work shifts.

Table 2 shows that, of the workers surveyed, the majority live in the province of Valencia (62%), followed by Alicante (29%) and Castellon (9%). By sectors, 47% work in services, 28% in administration and the public sector and 13% in industry. A little over half consider that the company where they work is growing (52%) and a large proportion that the company is stagnant (41%). There are slightly more men (54%) than women. By age groups, 76% are between 25 and 54 years old. Depending on the level of responsibility, 55% are employees without any subordinates under their charge. Another 17% are middle managers with staff under their supervision and bosses to whom they have to answer. 16% are bosses or directors. 79% have a permanent contract, 87% work full-time and 71% work a non-split working day. Finally, 22% are affiliated to a union and on average the workers have been in the company for 11 years. The average age of the companies surveyed is 28 years.

Table 3 shows the distribution of socioeconomic levels of the workers. 1 represents the highest level and 7 the lowest. Approximately 9% belong to the highest class. Groups 2, 3 and 4 make up the majority of the workers, with 31%, 19% and 27% of the sample, respectively. Finally, the last two classes together make up 14% of the workers.

To classify workers into social classes, the company carrying out the surveys used information on the number of people in the household, the number of people in the household with income, educational level, and occupation.⁴ These variables are shown in Table 4. On average, 30% of respondents live in houses with three cohabitants and 29% with two cohabitants. Regarding household income, 65% have two people with an income and 24% have only one person with an income. 34% of the workers have secondary or vocational training and another 19% have studied

⁴For more information on the correspondence between these variables and social class, see: *Nuevo sistema de clasificación en el EGM* (2015)

at university. By occupation, the majority are administrative (22%) and middle managers (22%). Finally, 53% do not have dependents in their care, while 20% and 19% take care of 1 or 2 people, respectively.

Table 2: Descriptive statistics from the workers' survey

Variable	Observations	Average	Standard Deviation	Minimum	Maximum
% Alicante	1508	29.0	45.4	0	100
% Castellón	1508	8.9	28.6	0	100
% Valencia	1508	62.0	48.5	0	100
% Administration	1508	28.2	45.0	0	100
% Agriculture	1508	1.5	12.3	0	100
% Construction	1508	4.7	21.2	0	100
% Hospitality	1508	4.6	21.1	0	100
% Industry	1508	12.9	33.5	0	100
% Services	1508	47.1	49.9	0	100
% Men	1508	54.2	49.8	0	100
% Women	1508	45.8	49.8	0	100
% 18-24 years old	1508	2.9	16.7	0	100
% 25-34 years old	1508	20.2	40.1	0	100
% 35-44 years old	1508	25.4	43.5	0	100
% 45-54 years old	1508	30.1	45.9	0	100
% 55 or more years old	1508	21.5	41.1	0	100
% in ascending phase	1508	52.4	50.0	0	100
% in descending phase	1508	6.4	24.5	0	100
% stagnant	1508	41.2	49.2	0	100
% directors	1508	5.0	21.9	0	100
% employees	1508	55.5	49.7	0	100
% management	1508	10.6	30.8	0	100
% supervisors	1508	17.2	37.8	0	100
% other jobs	1508	4.5	20.8	0	100
% work independently	1508	7.1	25.7	0	100
% permanent contract	1508	78.9	40.8	0	100
% temporary contract	1508	8.5	27.9	0	100
% other type of contract	1508	6.7	25.0	0	100
% permanent seasonal contract	1508	4.9	21.6	0	100
% temp agency contract	1508	0.6	7.7	0	100
% internship contract	1508	0.4	6.3	0	100
% full time	1508	87.1	33.5	0	100
% half day	1508	10.1	30.1	0	100
% weekend work	1508	0.2	4.5	0	100
% hourly work	1508	2.6	15.9	0	100
% non-split working day	1508	70.8	45.5	0	100
% full day with break	1508	29.2	45.5	0	100
% union members	1508	22.3	41.6	0	100
Years in company	1508	11.5	0.3	0	48

Notes: The table shows the characteristics of the workers who were surveyed in the “Encuesta de trabajadores”.

Table 3: Descriptive statistics of the workers' survey

Variable	Observations	Average	Standard Deviation	Minimum	Maximum
% Social class 1	1508	8.8	28.3	0	100
% Social class 2	1508	30.6	46.1	0	100
% Social class 3	1508	19.1	39.3	0	100
% Social class 4	1508	27.3	44.6	0	100
% Social class 5	1508	7.6	26.6	0	100
% Social class 6	1508	6.6	24.8	0	100
% Social class 7	1508	0.1	2.6	0	100

Notes: The table shows the characteristics of the workers who were surveyed in the "Encuesta de trabajadores".

Table 4: Descriptive statistics of the workers' survey

Variable	Observations	Average	Standard Deviation	Minimum	Maximum
% 1 cohabitant	1508	11.3	31.7	0	100
% 2 cohabitants	1508	29.0	45.4	0	100
% 3 cohabitants	1508	30.4	46.0	0	100
% 4 cohabitants	1508	25.0	43.3	0	100
% 5 cohabitants	1508	3.1	17.4	0	100
% 6 or more cohabitants	1508	1.1	10.2	0	100
% 1 person with household income	1508	23.7	42.5	0	100
% 2 people with household income	1508	64.7	47.8	0	100
% 3 people with household income	1508	9.6	29.4	0	100
% 4 people with household income	1508	2.1	14.2	0	100
% incomplete primary education	1508	0.4	6.3	0	100
% primary education	1508	1.6	12.5	0	100
% obligatory secondary education	1508	7.6	26.4	0	100
% baccalaureate or vocational studies	1508	34.2	47.5	0	100
% university degree	18.8	39.1	0	100	
% higher studies	1508	37.0	48.3	0	100
% administrative	1508	22.6	41.9	0	100
% comercial agents	1508	2.1	14.4	0	100
% foremen	1508	3.0	17.2	0	100
% director with 25 or more workers	1508	2.3	15.1	0	100
% director with 25 or less workers	1508	0.8	8.9	0	100
% junior employee	1508	3.3	17.9	0	100
% agricultural business with 1-5 workers	1508	0.3	5.1	0	100
% agricultural business with 6 or more workers	1508	0.1	3.6	0	100
% business with 1-5 workers	1508	2.0	14.0	0	100
% business with 6 or more workers	1508	0.9	9.2	0	100
% business with no employees	1508	1.8	13.3	0	100
% field workers	1508	0.1	2.6	0	100
% middle management	1508	21.8	41.3	0	100
% senior management	1508	4.0	19.6	0	100
% members of agricultural cooperatives	1508	0.1	2.6	0	100
% skilled workers	1508	8.4	27.8	0	100
% unskilled workers	1508	4.0	19.7	0	100
% other unqualified personnel	1508	3.3	17.9	0	100
% self-employed professionals	1508	5.3	22.4	0	100
% farm owners without employees	1508	0.1	2.6	0	100
% manual workers	1508	1.7	12.8	0	100
% dependents	1508	5.0	21.9	0	100
% other occupations	1508	7.0	25.6	0	100
% with 1 dependent	1337	19.6	39.7	0	100
% with 2 dependents	1337	19.3	39.5	0	100
% with 3 dependents	1337	2.9	16.8	0	100
% with 4 dependents	1337	0.4	6.7	0	100
% with 5 dependents	1337	0.2	4.7	0	100
% no dependents	1337	52.9	49.9	0	100
% all cohabitants are dependent	1337	4.6	21.0	0	100

Notes: The table shows the characteristics of the workers who were surveyed in the "Encuesta de trabajadores".

4 Spanish context

In this section we discuss the situation in Spain in the context of labour productivity, working hours and unemployment. Through analysis of these variables, both in comparative terms with respect to other countries in the European Union, and in their historical evolution, we reach three main conclusions.

First, the reduction in average annual working hours was significant between 1870 and 1980. However, since the late 1980s these annual hours have been very stable. At the same time, productivity per hour of work has not stopped rising. Second, compared to other European countries, there is room to reduce work time and achieve productivity improvements. Third, Spain suffers from higher secular unemployment than its surrounding countries. Youth unemployment is even more concerning. Therefore, policies to reduce work time could be very advantageous if they were combined with strategies to reduce unemployment, especially for young adults.

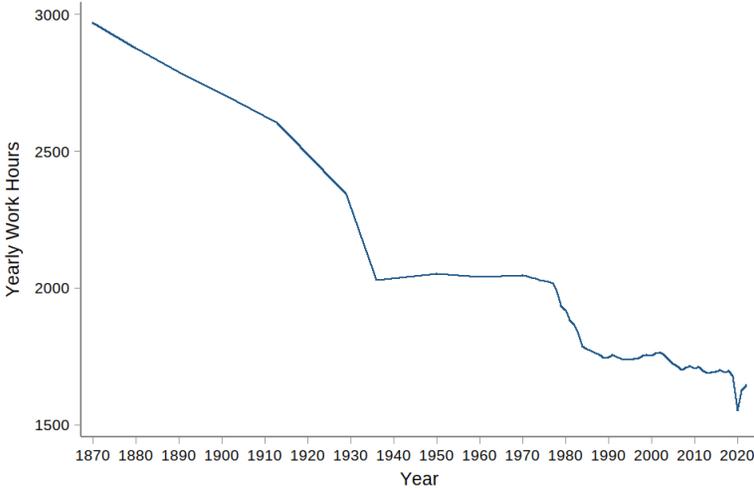
4.1 Annual hours and productivity per hour

Graph 1a shows that between the end of 1870 and the 1930s is when the most important and ongoing advances in reducing work time occurred. Then, for 30-40 years, annual working hours remained largely unchanged. The last significant reduction in work time in Spain occurred in the late 1970s and early 1980s. Two changes established by law around that time were the introduction of the 40-hour working week and the right to 30 days holiday. Since then, there have been no significant or permanent reductions. During the 2000s there were some oscillations, likely related to the Spanish housing bubble in 2008, although not as significant as previous ones. During the Great Recession which followed, annual hours remained stable and it was not until the pandemic that they fell sharply again due to the forced reduction in activity as a way of containing the spread of the virus. In the final part of the series, a rapid, although not complete, recovery in the number of annual working hours can be seen.

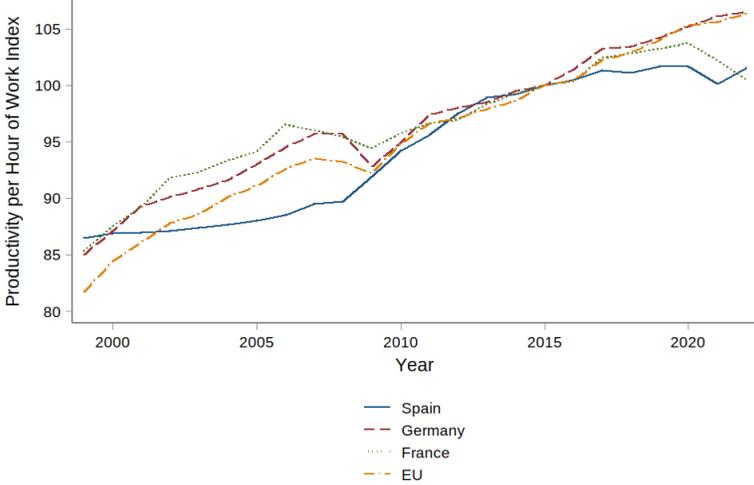
It is clear, therefore, that since the mid-80s annual working hours have stagnated in Spain. However, during these years, factories, offices and other workplaces have also undergone important technological changes that have increased productivity per hour worked, such as the introduction of computing or the robotisation of many production processes. Graph 1b shows the evolution of

productivity per hour in Spain and in the EU. In the case of Spain, productivity per hour worked has increased by 17.3%. For the EU countries as a whole, the increase has been 30.1%.

Figure 1



(a) Time series of annual working hours



(b) Time series of hourly productivity

Notes: Panel (a) shows the temporal evolution of annual working hours in Spain. Panel (b) shows the evolution of productivity per hour worked. Sources: [Huberman and Minns \(2007\)](#), OECD and Eurostat.

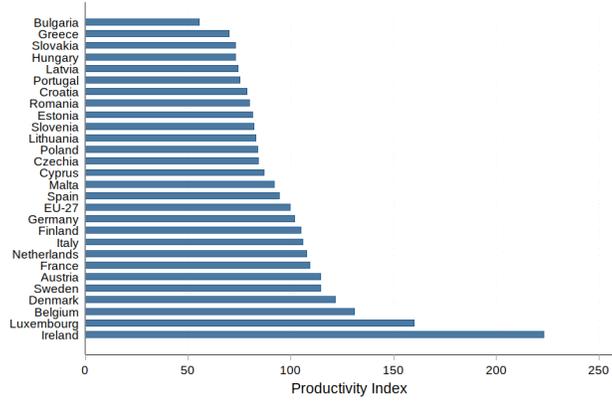
4.2 Weekly working hours and productivity: comparison with other European countries

Within the EU-27, Spain falls outside the European average in both labour productivity and number of working hours: labour productivity in Spain is about 5 points below that of the EU-27 (see Figure 2a), while the Spanish average weekly working hours are 37.8 hours, a little more than in the EU, which are 37.5 (see Figure 2b).

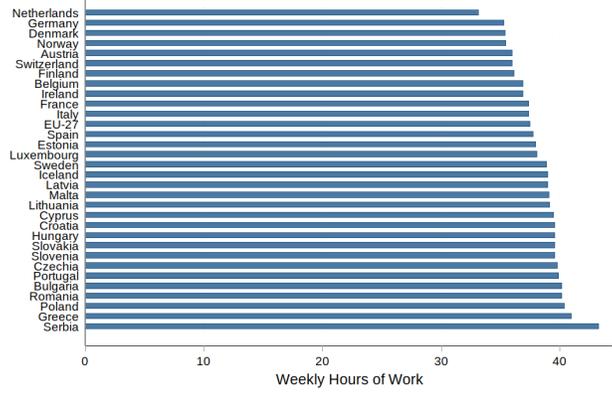
If we compare the data from Spain with the countries with higher levels of productivity in the EU such as Germany, France, the Netherlands, or Denmark, we see that in Spain more hours are worked and less is produced for each hour of work. In fact, Graph 2c confirms that there is a negative and significant correlation between productivity and working hours. Each blue dot represents a country and the red line is the slope of the regression line between one variable and the other. The coefficient (shown in the upper right part of the figure) indicates that for each additional hour of work, the productivity index is 9 points lower.

Therefore, the comparison with our neighbouring countries suggests that there is room to reduce work time and achieve productivity improvements. Consistent with this approach, and anticipating the presentation of the results in section 5, we show that the majority of managers do not think that a reduction in work time would reduce the number of tasks that employees complete weekly.

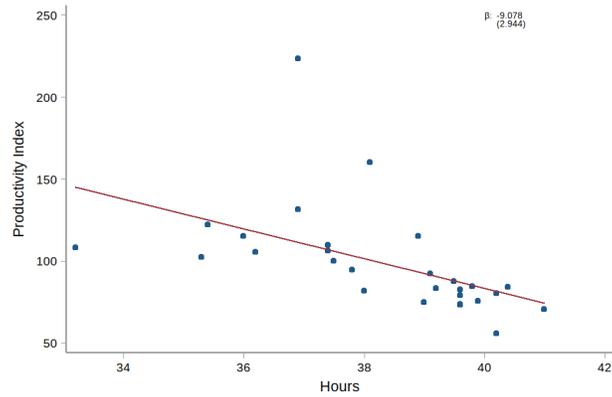
Figure 2



(a) Productivity



(b) Weekly working hours



(c) Correlation between productivity and hours worked

Notes: Panel (a) shows the level of labour productivity for different countries. Panel (b) shows working hours per week. Panel (c) shows the relationship between the two variables. Source: Eurostat.

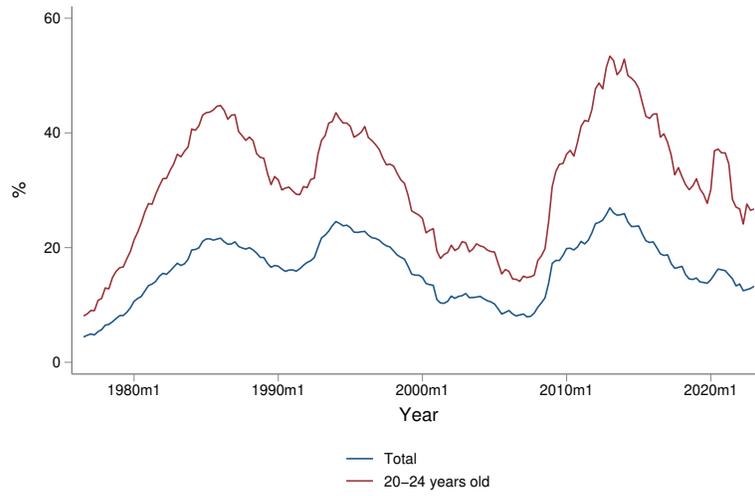
4.3 High unemployment rate

One of the most unfortunate characteristics of the Spanish labour market is its high level of unemployment. Graph 3a shows a historical series of the unemployment rate since the late 1970s. The blue line represents unemployment for the general population, while the green and red lines show youth unemployment. Graph 3b shows a comparison of unemployment in Spain with that of France and Germany. These figures lead us to make the following conclusions.

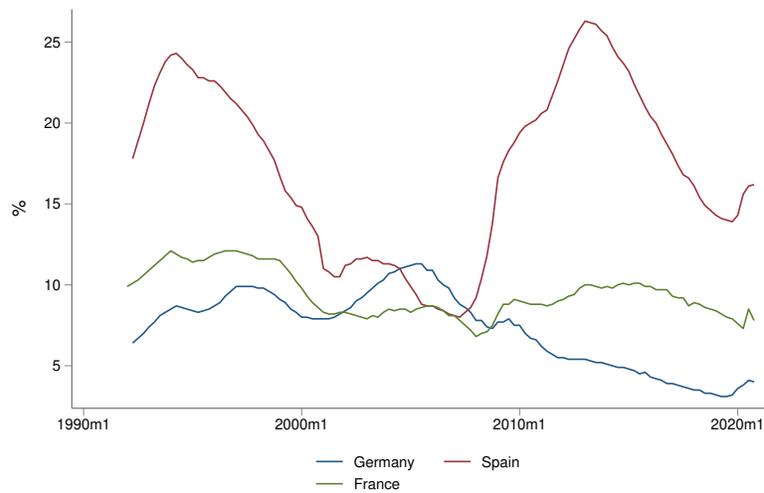
Firstly, the Spanish unemployment rate has practically always been higher than that of neighbouring countries. Secondly, in times of crisis it reaches levels above 20%. In comparison, in France or Germany, at worst this is about 12%. Thirdly, the level of youth unemployment is alarmingly high throughout the entire series. At its worst, youth unemployment levels exceeded 40%. This last fact is especially serious considering that the first few years in the labour market have long-term effects (von Wachter and Bender, 2006; Oreopoulos et al., 2012). Difficulties in entering the labour market produce “scars” that are not easy to reverse and can explain, in part, the high Spanish unemployment. Finally, although unemployment is reduced in times of economic prosperity, it seems that economic growth is not the only policy that can reduce it. It is true that, during the housing boom years, unemployment reached minimum levels but, after the housing bubble burst, the number of unemployed rose rapidly and on a persistent basis.

In light of the above, it is pertinent to consider under what conditions the reduction of work time could help to reduce unemployment. In other words, what policies should be implemented together with a capping of working hours to achieve a reduction in unemployment? In sections 8 and 11 we discuss this issue further.

Figure 3



(a) Total unemployment rate and youth unemployment rate



(b) Total unemployment rate by country

Notes: Panel (a) shows the evolution over time of the total unemployment rate and youth unemployment rate in Spain. Panel (b) compares the time series of total unemployment for Spain, France and Germany. Sources: EPA and Eurostat

5 How would reducing the working week to 32 hours affect the number of tasks completed?

The first question posed is how many companies do not foresee negative effects on their level of production and productivity with a reduction in work time. Pilot studies completed so far show that companies can maintain the same level of economic activity, or even grow, after reducing working hours (K. Lewis, 2023). However, a limitation of these pilot studies is that they are voluntary. The consequence of this is that we do not know whether the positive results on business activity are generalisable or not.

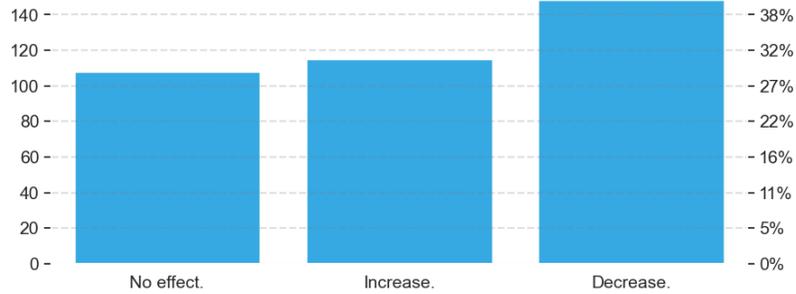
In order to understand how many companies believe they would be able to maintain the same level of activity, in the survey involving managers we asked the following question: “Imagine that in your company the working week was reduced to 4 days or 32 hours per week. How do you think it would affect the number of tasks performed weekly?”.

From the analysis of the responses in Figure 4a we reach two conclusions. On the one hand, for 60% of companies in the Valencian Community, the reduction in work time would not reduce the number of tasks performed weekly. Therefore, implementing political change should be relatively simple in these companies. Specifically, 29% respond that the volume of tasks completed would remain constant and 31% say that it would increase. This is likely due to the physiological and motivational changes that more free time would have on workers, as well as the organisational changes that would be implemented at business level. Evidence that supports this perception is presented in section 6.

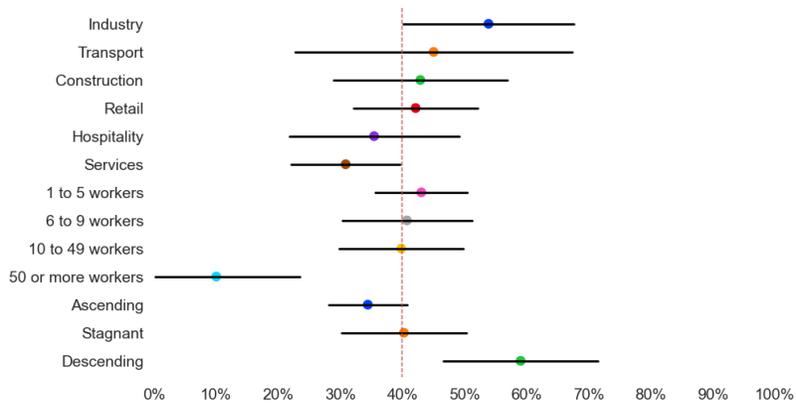
On the other hand, 40% of companies think that reducing the working week to 4 days or 32 hours per week would lead to a reduction in the tasks that their workers perform weekly. This is not an insignificant percentage and points to the importance of careful consideration of how a change to working hours should be implemented to minimise or eliminate potentially negative effects. This is analysed in more detail in sections 6, 8 and 11, but, for now, we can summarize it as: first, the reduction of work time should be gradual, accompanied by informing staff of the organisational and technological changes possible in each sector to minimise potential cost increases; second, the limitation of working hours should be accompanied by training policies for workers who could take on the jobs that are freed up by reducing the working week.

Figure 4b disaggregates the result by sector, company size and economic phase of the company. The coloured dots reflect the percentage of employers who consider that a reduction in work time would mean a decrease in the tasks performed weekly. The black lines show the 95% confidence intervals. This figure tells us that the impacts may be different, depending on the characteristics of each company. Therefore, the design of the implementation should take this into account. By sector, companies that foresee a negative impact range from 54% in the manufacturing sector to 31% in the services sector. The differences are also very clear in relation to the number of workers in the company. 40% of small and medium-sized companies predict negative effects, while only 10% of those with more than 50 employees share this opinion. Finally, almost 60% of companies in the downward phase think that the effect would be negative, which likely reflects that they have a very tight number of workers.

Figure 4



(a) How would a reduction to 32 hours of work per week affect the number of tasks performed by workers?



(b) Disaggregation by sector, number of employees and economic phase of companies that believe that the number of tasks would decrease.

Notes: Panel (a) shows how companies consider that the tasks that their workers perform weekly would be affected by a reduction in working hours to 32 per week. The information was collated from the responses given to question number 27 in the managers' survey. Panel (b) shows the characteristics of companies that believe that the number of tasks would decrease, disaggregated by sector, number of employees and economic phase.

6 How could a reduction in work time increase productivity?

In section 5 we learnt that for approximately 60% of the companies in the Valencian Community, increases in productivity would be automatic. In other words, many hours of work that are not actually productive would be eliminated. However, 40% of companies in the Valencian Community would need to consider how to achieve increases in productivity to be able to reduce working hours without affecting production. In this section we discuss three major mechanisms through which a reduction in work time could trigger productivity improvements (De Spiegelare and Piasna, 2017; White, 1987): organisational changes, physiological and motivational changes, and

in human capital and creativity.

6.1 Organisational changes

A reduction in work time can be a catalyst for improvements in business organisation that promote productivity. Theoretically, labour regulations that improve workers' conditions decrease the number of low-quality jobs and increase the number of high-quality jobs (Acemoglu, 2001). One of the reasons why this occurs is that companies promote organisational or technological changes to adapt to a more demanding labour market.

Therefore, labour regulations promote the modernisation of productive structures. Indeed, empirical evidence supports these conclusions. For example, the reduction of the working week in South Korea increased productivity (Park and Park, 2019), and the creation of the minimum wage in Germany increased employment in companies with higher productivity (Dustmann et al., 2021). There is also evidence that policies that worsen working conditions negatively affect productivity. This was the case in the liberalisation of temporary contracts in Italy, which produced a reassignment of workers in jobs with lower added value (Daruich et al., 2023).

The survey results show evidence that supports this. The results reveal that workers consider that a reduction in work time would promote organisational changes and increase the formulation of proposals for organisational improvement (see Figure 5). Specifically, workers predict less downtime and greater specialisation in the tasks performed. In the survey of managers, the results also suggest that there would be improvements in coordination and reduction of downtime (see Figure 6).

Yet not all companies have the same capacity to generate organisational change. Therefore, any planning should also involve the dissemination of information about what changes can be implemented to improve productivity in a context of fewer working hours. This should be done sector by sector and for both small and medium-sized companies, as well as in large companies.

6.2 Physiological and motivational changes

Working for less time means less fatigue and, therefore, helps avoid hours in which employees work more slowly and produce less (Virtanen M, 2009). Likewise, increased rest time improves

recovery after work-related physical effort and stress. In general, workers who are more rested and have a greater ability to concentrate are more productive. Working fewer hours also increases the willingness to work more effectively. We believe that the positive physiological and motivational effects, together with the widespread culture of presenteeism at work, are the main reasons why 60% of management positions predict that there would be no negative impact on production (see section 5).

Some of these possible outcomes are also reflected in the workers' survey. The workers state that they would have more involvement in the company and the work process. Likewise, they also expect there to be a reduction in sick leave, absenteeism and workplace accidents (see Figures 7 and 8).

The managers' survey also corroborates these results. People with management responsibilities think that a reduction in hours would improve the involvement of workers in the company, employee retention, and relationships between workers and between them and senior managers (see Figure 6).

However, it is important not to take physiological improvements as an automatic effect of reduced work hours. It is possible that to avoid drops in production, the pressure under which some employees work increases, which can lead to more stress and negative effects on their mental and physical health (Piasna, 2015). In fact, after a reduction in the working week to 35 hours in France, a third of the workers complained of an increase in work stress (Lehndorff, 2014). Therefore, this risk should be taken into account when implementing the change (see section 11).

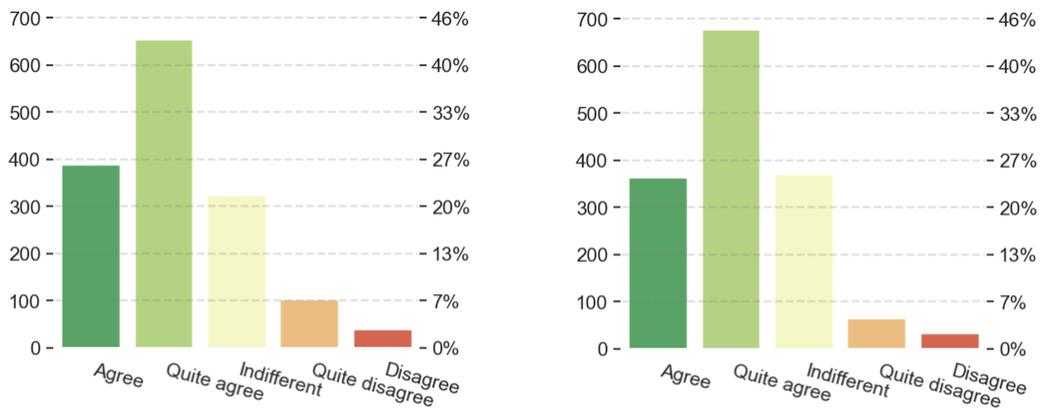
6.3 Changes in human capital and creativity

One aspect of a reduction in working hours is that it can stimulate training, which should lead to productivity improvements. In fact, almost half of the workers consider that reducing work time would lead to an increase in training needs (Figure 9). Therefore, reducing working hours can encourage companies and workers to improve their skills to achieve productivity increases that facilitate working fewer hours without economic activity suffering negative repercussions.

Furthermore, working fewer hours should have a positive effect on creativity. In fact, building a workforce that is more creative is a crucial factor in stimulating technological change and economic

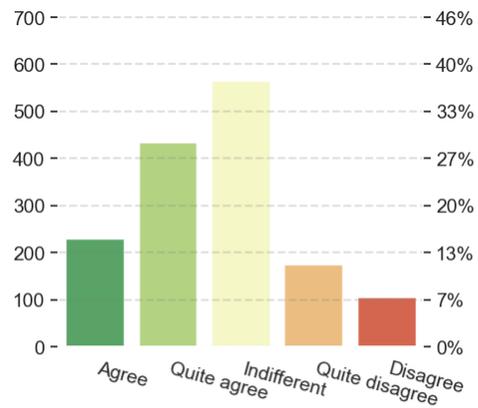
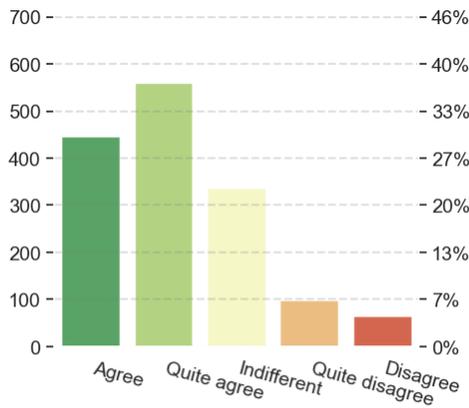
growth (Romer, 1986, 1990). The positive effects on creativity may be twofold. First, a more rested workforce should be more creative, with positive effects on labour productivity. Second, workers may choose to dedicate part of the additional free time to artistic, social, business, innovation and development projects, etc., which would otherwise not be possible in the current context of longer working hours (Romer, 1990).

Figure 5



(a) If working hours were reduced to 32 per week, would there be changes in the way work is organised?

(b) If working hours were reduced to 32 per week, would there be an increase in proposals for organisational improvements?

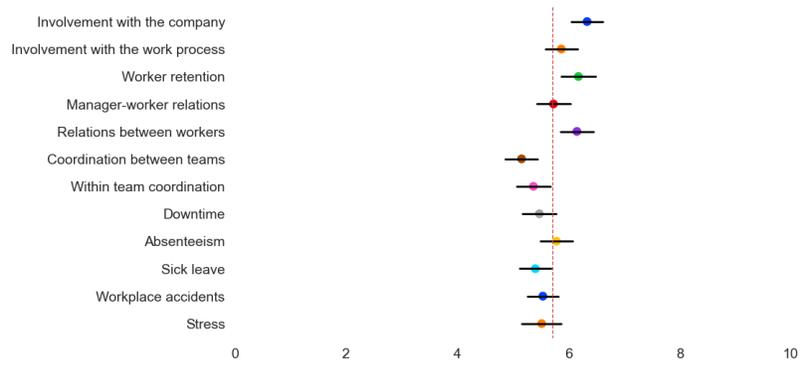


(c) If working hours were reduced to 32 per week, would downtime be reduced in the job?

(d) If working hours were reduced to 32 per week, would there be a reduction in the variety of tasks for each employee?

Notes: The graphs show the degree of agreement or disagreement of workers on what reducing working hours to 32 per week would mean regarding changes at work. This information was collated from responses given to question number 20 in the workers' survey.

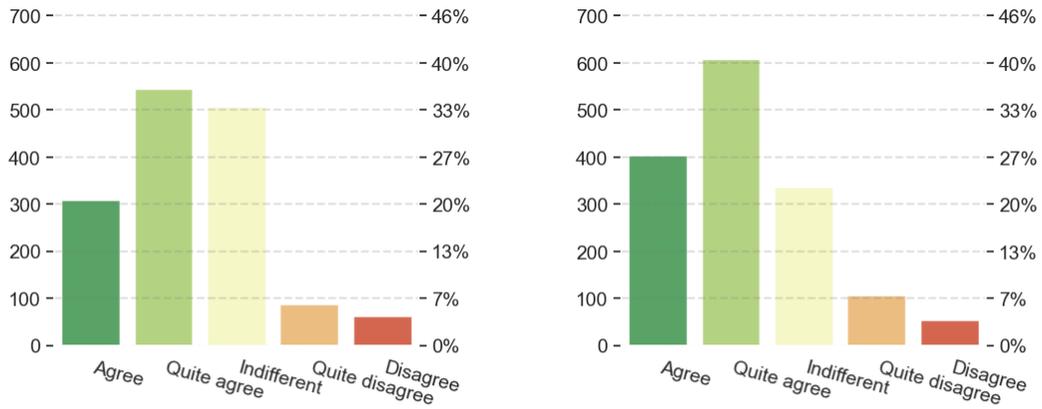
Figure 6



(a) Degree of agreement or disagreement with the statements

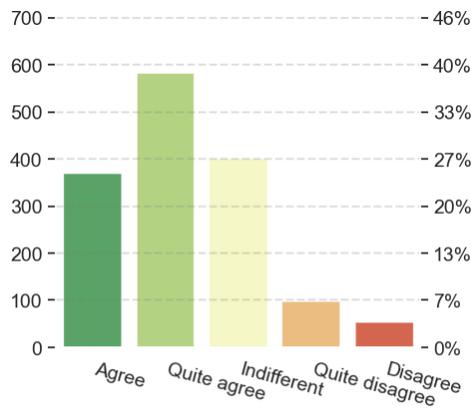
Notes: The graph shows the degree of agreement or disagreement of managers regarding some changes that could be generated by reducing working hours to 32 per week. This information was collated from the responses given to question number 29 in the managers' survey. 0 indicates that the situation would get worse and 10 that it would improve.

Figure 7



(a) If working hours were reduced to 32 per week, would it decrease workplace accidents?

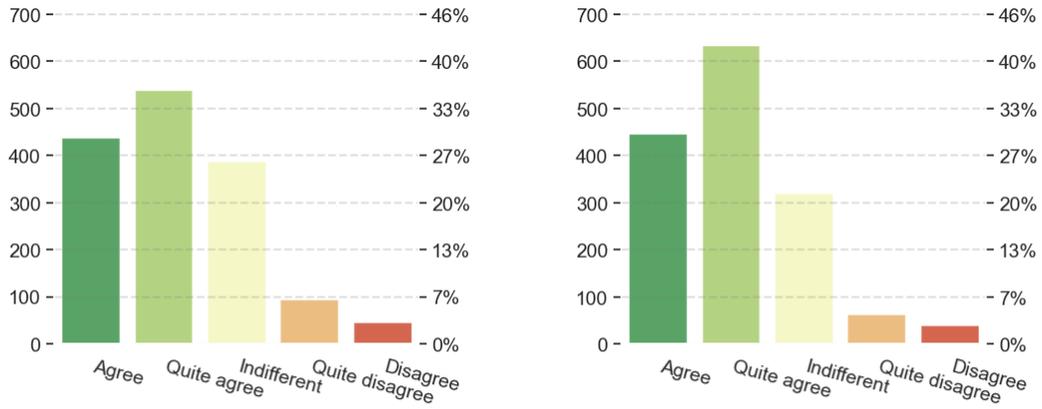
(b) If working hours were reduced to 32 per week, would it decrease absenteeism from work



(c) If working hours were reduced to 32 per week, would sick leave decrease?

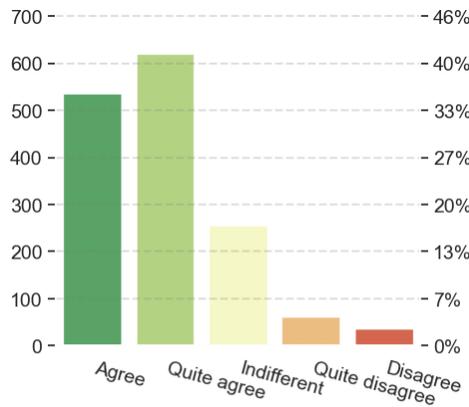
Notes: The graphs show the degree of agreement or disagreement of workers to changes that might come about as a result of reducing working hours to 32 per week. This information was collated from the responses given to question number 20 in the workers' survey.

Figure 8



(a) If working hours were reduced to 32 per week, would the difficulties in employing staff decrease?

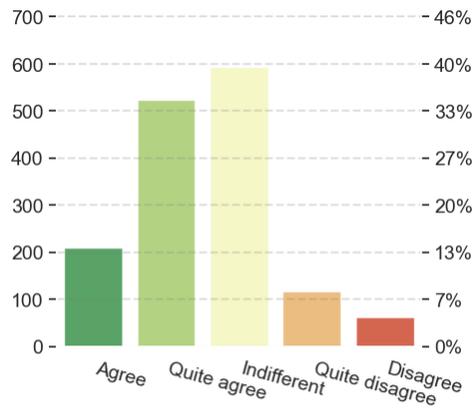
(b) If working hours were reduced to 32 per week, would involvement in the work process increase?



(c) If working hours were reduced to 32 per week, would involvement with the company increase?

Notes: The graphs show the degree of agreement or disagreement of workers on the changes that would come about as a result of reducing working hours to 32 per week. This information was collated from the responses given to question number 20 in the workers' survey.

Figure 9



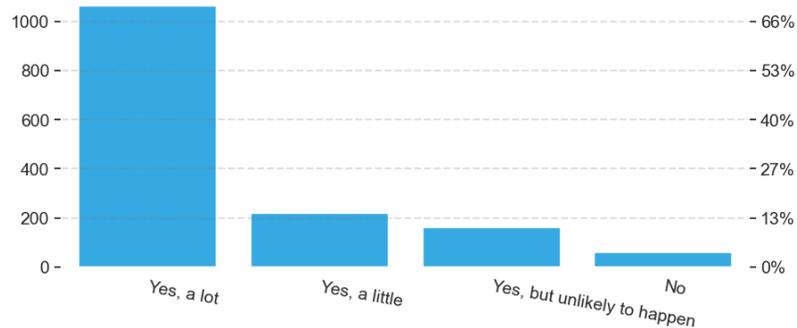
(a) If working hours were reduced to 32 per week, would training needs increase?

Notes: The graph shows the degree of agreement or disagreement of workers regarding whether reducing working hours to 32 per week would increase training needs. This information was collated from the responses given to question number 20 in the workers' survey.

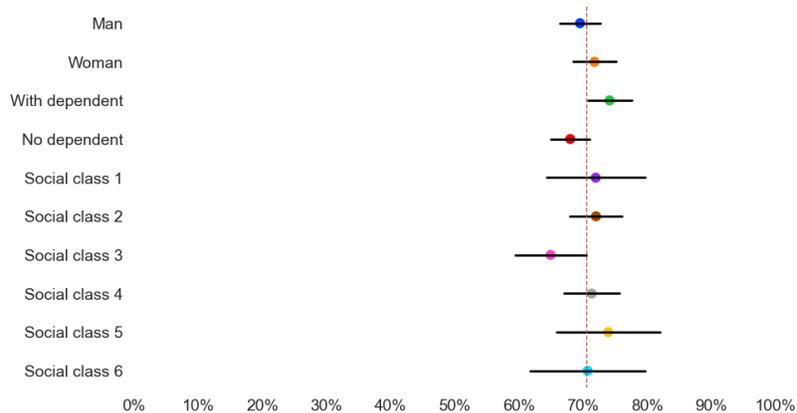
7 Is there a social demand for reduced working hours?

There is major, and transversal, support by workers for a reduction in working hours if salary can be maintained. This social demand is in response to workers wanting more time for rest and leisure. Specifically, 71% of workers believe that reducing the hours of the working week would help them a lot to improve work-life balance (see graph 10a). Another 15% think that it would help them somewhat and 11% that it would help them, but they do not believe that their company would accept it. Furthermore, Graph 10b shows that, when this result is disaggregated, the demand is very transversal, be it by gender or by those people who have dependents in their care or by socioeconomic level.

Figure 10



(a) Would a reduction in weekly working hours to 32 help you to achieve a better work-life balance?



(b) Disaggregation by gender, dependent person and social class of the workers and whether they consider that reducing work time would help them a lot

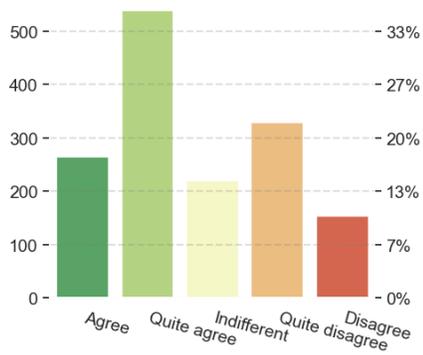
Notes: Panel (a) shows whether workers think they could achieve a better work-life balance by reducing their working hours to 32 per week. This information was collated from the responses given to question number 16 in the workers' survey. Panel (b) disaggregates workers by gender, dependent person and social class and shows who consider that reducing work time would help them a lot.

More specifically, achieving more free time would mainly help the 28.9-37.2% of the population who state that their working day does not leave them enough time to be with their family (32.1%, Figure 11a), for leisure (32.1%, Figure 11b), to take care of their physical health (28.8%, Figure 11c) or for activities outside of work that they enjoy and that help improve their mental health (34.2%, Figure 11d). Consistent with these data, a similar percentage of respondents consider that their working day leaves them feeling exhausted (36.1%, Figure 11c) and that they do not have enough time to rest or focus on personal goals (37.2%, Figure 11f). Figure 12 shows the disaggregation of these graphs according to gender, dependents, or socioeconomic level and indicates that the group of people with the lowest socioeconomic level would be the main beneficiaries of a reduction in work time.

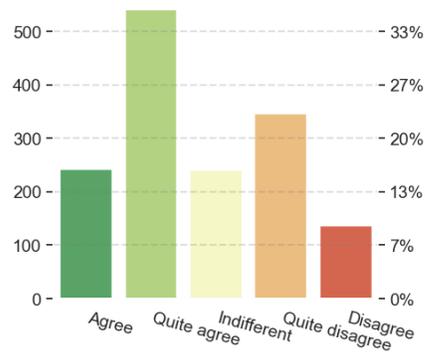
In question 18 of the workers' survey, the interviewees describe how they would spend their additional free time. Consistent with the shortfall identified in the previous question, the results show that the preferred options are: spending time with the family (67%), dedicating time to leisure (59%), resting (59%), doing domestic chores (45%) and spending time with friends (39%). A smaller percentage of respondents, but still significant, say that with the additional free time they would like to travel more (30%), improve their skills (26%) or carry out activities to improve their mental well-being (21%).

The results of this question also suggest that economic activity would increase in some sectors, for example, in leisure, sports, education or tourism. In section 8 we discuss the implications this may have for employment.

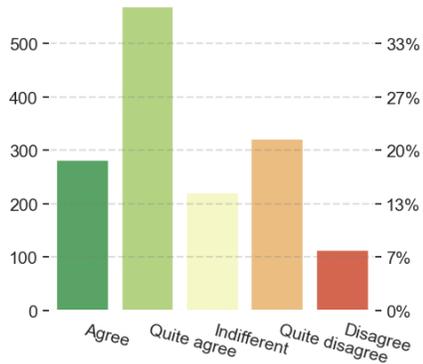
Figure 11: The current working day allows me to...?



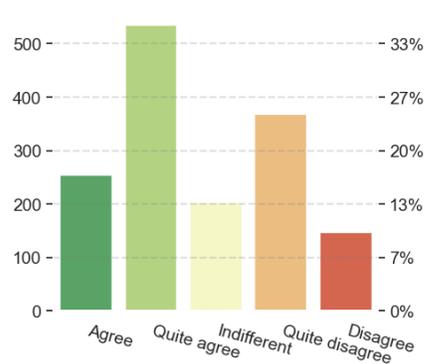
(a) Spend enough time with family.



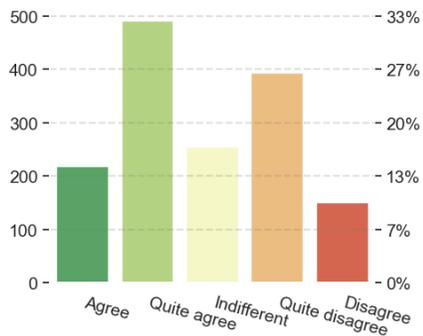
(b) Dedicate enough time to leisure.



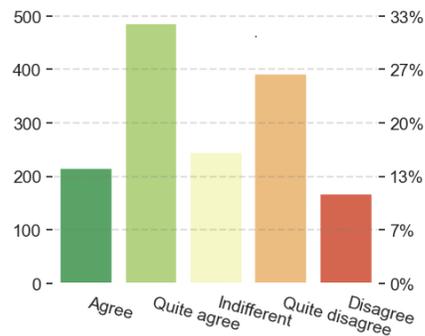
(c) Dedicate sufficient time to personal hygiene, sports, food, etc.



(d) Dedicate sufficient time to activities outside of work that make me happy



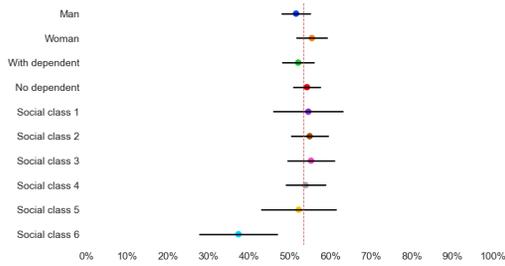
(e) The working day leaves me feeling exhausted.



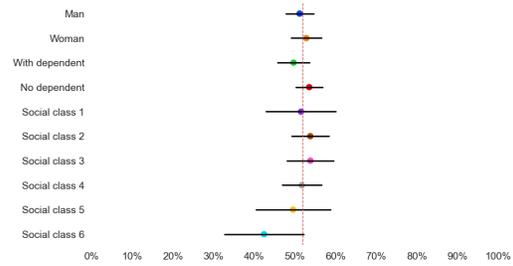
(f) Resting, focusing on personal goals, etc.

Notes: The graphs show the degree of agreement or disagreement of workers on what activities they have time to do after their working day. This information was collated from the responses given to question number 15 in the workers' survey.

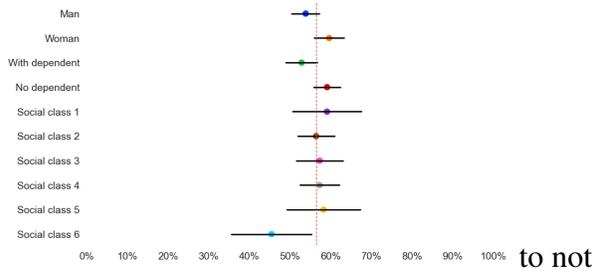
Figure 12: Disaggregation by gender, dependent person and social classes



(a) Response to not having enough time with the family.

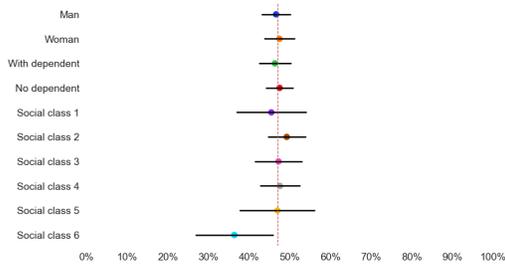


(b) Response to not having enough time for leisure

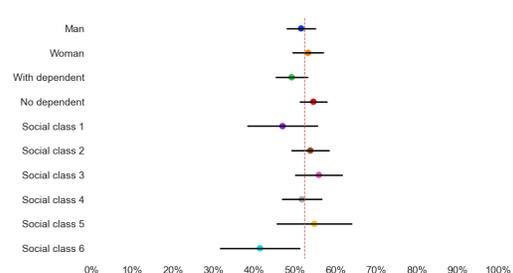


(c) Response to not having enough time for activities that make them happy

having enough time for personal hygiene, sports, cooking, etc.



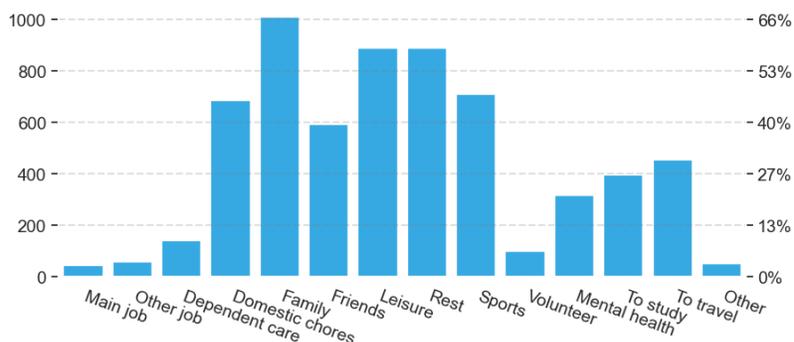
(d) Response that the hours of work exhaust them



(e) Response to not having enough time to rest or for personal goals

Notes: The graphs shows disaggregated by gender, dependent person and social class the responses on what activities workers do not have time to do after their working day. This information was collated from the responses given to question number 15 in the workers' survey.

Figure 13



(a) What would you use the additional free time for?

Notes: The graph shows what workers would dedicate their additional free time to if the working hours were 32 per week. This information was collated from the responses given to question number 18 of the workers' survey.

7.1 4 days, or less hours spread over 5 days?

Reducing work time can take different forms. For example, all workers could stop working one day a week. One possibility is that all workers could have the same day off. Alternatively, each of them could have a different free day. Likewise, there could be a 5-day work week but working shorter days. Again, workers may have the same work timetable, or have varied timetables. In this section we analyse the preferences, both of workers and companies, regarding these different options. An initial conclusion is that the preferred option, both for employers and workers, is for employees to work one less day a week. Below, we discuss the evidence in more detail.

Figure 14a shows the results of the responses from workers regarding their preference for the options above. Approximately 3 out of 4 prefer the option of working one day less a week. The other two options of working the same days but fewer hours (14%) or maintaining the same weekly hours but having more holiday per year (10%) are much less supported.

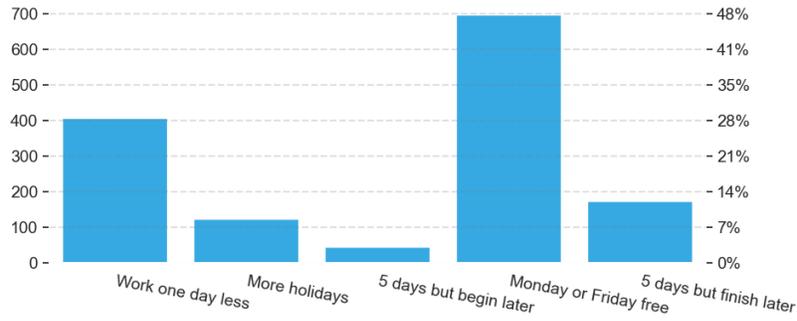
Next, we disaggregate the results by gender, whether they are responsible for a dependent person or not, and by socioeconomic level (see Figure 14a). The results by gender or dependent person are very similar. However, by socioeconomic level, a different pattern is observed: workers from lower social classes have a stronger preference for having an additional day off, compared to working fewer hours spread over 5 days. In any case, it is not advisable to emphasise the differences too much, since the majority in favour of working one day less is overwhelming in all

categories.

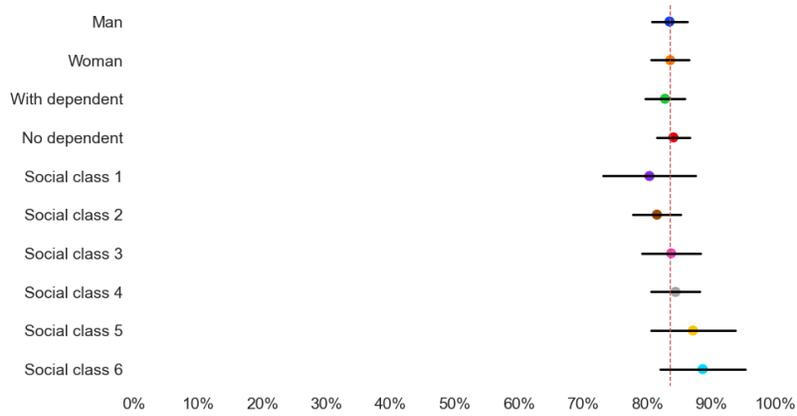
Figure 15 shows the results from asking managers about their preferences regarding each of these options. In this case, respondents were asked to rank their preferences from 1 and 4, where 1 was the best option and 4 the worst. Managers preferred the option for workers to work 4 days a week but not to have the same day off in the week. Their least preferred option was for all workers to work 4 days a week and have the same day off. The second most popular option was to maintain a 5-day working week, but for workers to work fewer hours each day in a homogeneous manner.

Therefore, although the preferences of managers and workers are not exactly the same, the degree of compatibility is high. This is important because, for correct implementation of a change in hours worked, negotiation and the involvement of employers and workers will be necessary. Furthermore, pilot studies in the United Kingdom show that it is through dialogue that organisational improvements which can increase productivity can be properly identified (K. Lewis, 2023).

Figure 14



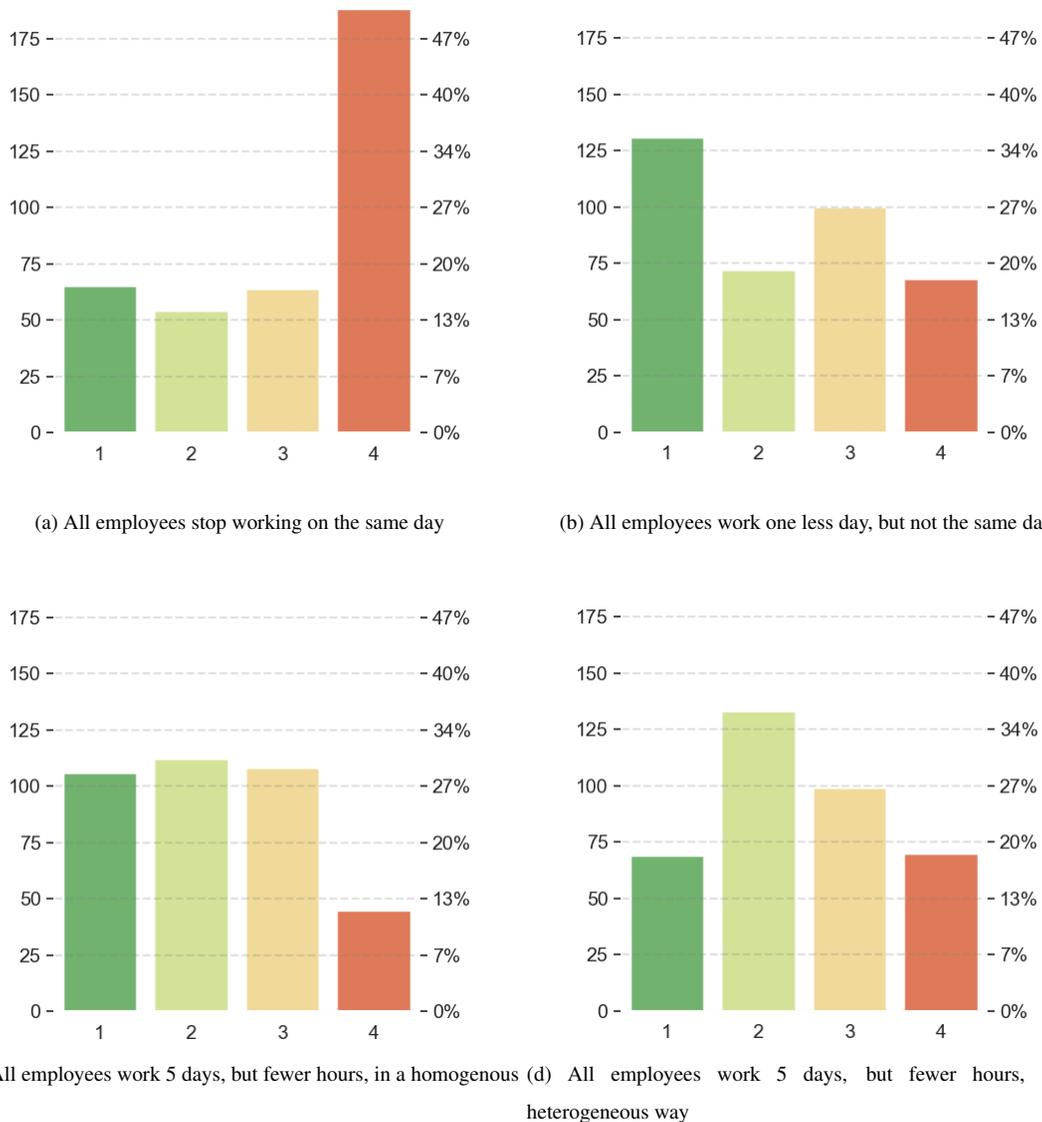
(a) How would you like the reduction in work time to be done?



(b) Disaggregation by gender, dependent person and social class of workers who prefer a day less compared to those who prefer fewer hours and 5 days

Notes: Panel (a) shows workers' preferences on how to organise a 32-hour working week. Panel (b) disaggregates those who prefer one day less, compared to those who prefer fewer hours and 5 days, by gender, dependent person and social class. This information was collated from the responses given to question number 17 in the workers' survey

Figure 15: If you were obliged to reduce the working week and maintain the workers' salary, how would you order your preferences?



Notes: The graphs show the preferences of managers regarding different distribution possibilities for a 32 hour working week. 1 indicates a greater preference and 4 a greater dislike. This information was collated from the responses given to question number 31 in the managers' survey.

8 Can employment levels increase?

Can reducing work time serve to reduce unemployment? If so, would unemployment go down because some sectors would expand? Or would this happen because companies would employ

more staff? Or would it be the result of minimising the loss of jobs through so-called technological unemployment? These are the main questions we address in this section. Additionally, we also argue that, to enhance the possibilities of reducing unemployment, it may be necessary to accompany the reduction of work time with policies that help increase the training and preparation of the workforce. We begin by discussing the case of the expansion of some sectors of the economy, since we believe that the greatest increase in terms of employment would come through this channel.

8.1 Increase in economic activity due to increases in demand

As mentioned in section 7 reducing work time would likely increase economic activity in the leisure, sports, educational and tourism sector (Figure 13a). Therefore, with a probable increase in demand towards these sectors, this would help expand economic activity and increase employment (Gomes, 2021).

Henry Ford, in his reflections on the reduction of work time in the United States, offered important insights to understand this phenomenon (Ford, 1926). His argument was based on the fact that people who work long hours do not have time to consume. In other words, they have less time to shop in stores, dine in restaurants, enrol in a course, join the gym, invest in their hobbies or visit other places. In this sense, increasing leisure time does not have a negative effect on the economy, but rather helps fuel the economic mechanisms of consumption.

Section 6 discussed how the reduction of work time can catalyse organisational changes that modernise labour relations. We now show that the same policy can promote structural change and transformations that promote economic development.

8.2 Would there be an increase in hiring?

On the one hand, in section 6 we argued that the reduction of work time would catalyse organisational, technological, physiological, motivational and human capital changes that would increase productivity. In this way, any increase in labour costs on the business budget could be offset. However, this also means that for each hour of work time reduction, an additional hour of work would not be created for someone else. In other words, if working 32 hours a week implies a 20% reduction in work time, employment is not likely to increase proportionally.

Therefore, the increase in employment will probably not be at a ratio of 1 to 1. Consistent with this argument, almost 20% of managers respond that it would not be necessary to employ more personnel as a consequence of reducing work time (Figure 16a).

On the other hand, practically 80% of companies do believe that more workers would be employed. We suspect this may be an overstated view, for various reasons: first, because in many companies there are certain jobs in which it is difficult to increase productivity; second, most companies admit to not having given much thought to the matter (see Figure 17a), and, therefore, they may be exaggerating the real employment need; and, lastly, the implementation of a reduction to 32 hours per week would be gradual so, with more time to adapt, additional employment requirements would probably diminish.

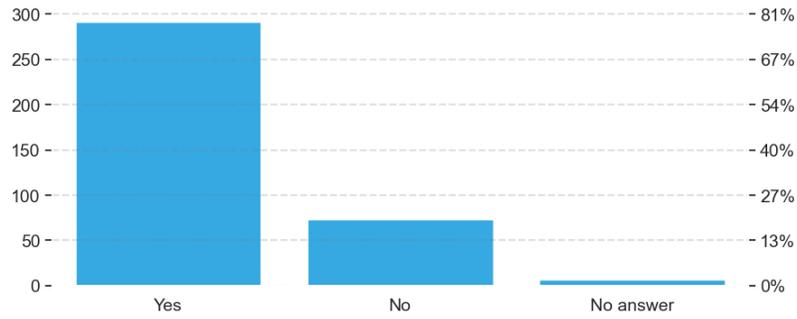
However, employment levels are likely to increase. This could be problematic, since companies also believe there would be a shortage of labour with the necessary skills to carry out the work (see Figure 18a). Therefore, it is important to accompany the policy of reducing work time with policies that increase the availability of a workforce with sufficient training. This point is discussed further in section 11, where we talk about the political implementation of work time reduction.

8.3 Would technological unemployment be reduced?

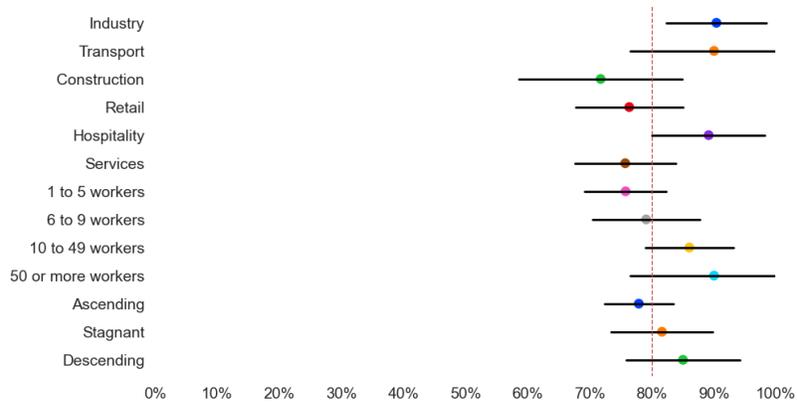
The implementation of new technologies makes some work hours unnecessary. In light of these redundant hours, a company would consider changing its organisation and laying off some workers. By reducing the working week to 32 hours this means there are less potentially redundant hours and so this could help to delay or limit layoffs. The book written by Gomes (2021) contains a chapter that discusses this possibility at length.

In the current context of potential automation of many jobs (Frey and Osborne, 2017), reducing the working week may be a way of reducing unemployment. However, the aspect of automation is not covered by our survey.

Figure 16



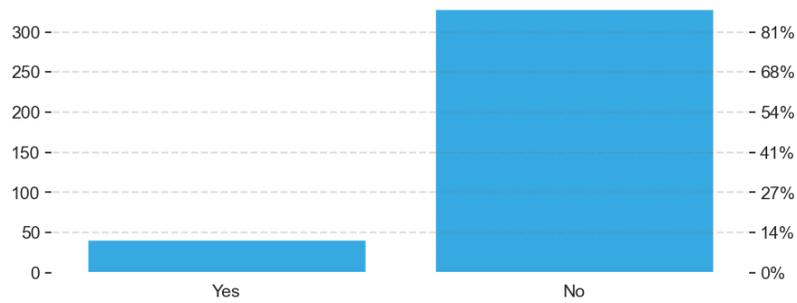
(a) Would it be necessary to employ more staff if working hours were reduced to 32 per week?



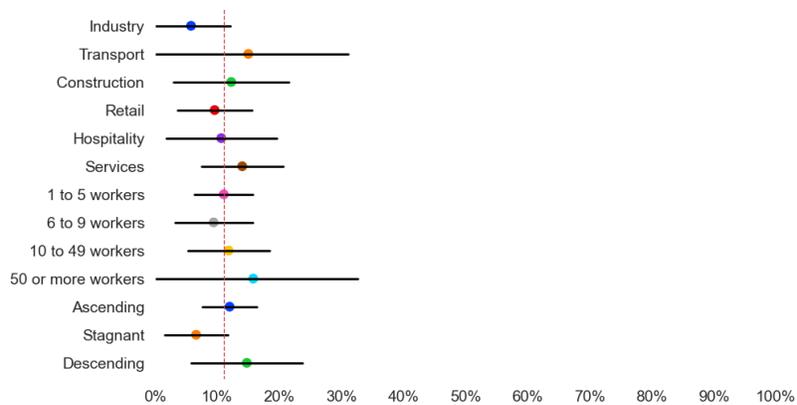
(b) Disaggregation by sector, number of employees and economic phase of the companies that consider it would be necessary to employ more staff

Notes: Panel (a) shows whether companies consider that it would be necessary to employ more staff as a result of reducing working hours to 32 per week. The information was collated from responses given to question number 28 in the managers' survey. Panel (b) shows the results disaggregated by sector, number of employees and economic phase.

Figure 17



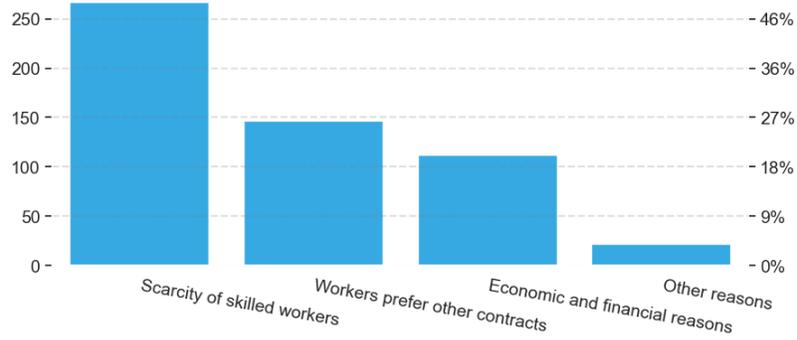
(a) Has the company considered reducing working hours to 32 per week?



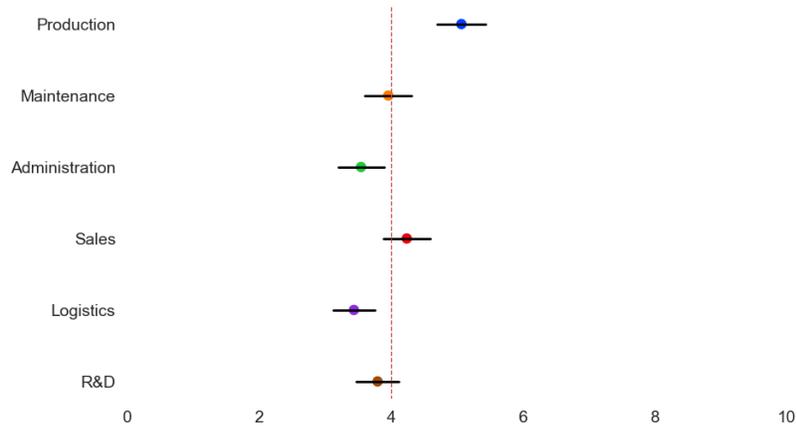
(b) Disaggregation by sector, number of employees and economic phase of companies that have not considered reducing working hours to 32 per week

Notes: Panel (a) shows whether companies have considered reducing working hours to 32 per week. The information was collated from the responses given to question number 24 in the managers' survey. Panel (b) shows the results disaggregated by sector, number of employees and economic phase.

Figure 18



(a) What are the reasons why there are jobs that are difficult to fill?



(b) In which sections would it be most difficult to fill new jobs?

Notes: Panel (a) shows the reasons why there are jobs that are difficult to fill. The information was collated from the responses to question number 23 in the managers' survey. Panel (b) shows the difficulty of finding the right workers according to the department in which they work. 0 indicates the least difficulty and 10 indicates the greatest difficulty. The information was collated from the responses given to question number 22A in the managers' survey.

9 Work-life balance

What effects could reducing work time have on the reconciliation of personal and work life? Could it help balance the distribution of domestic and care tasks between men and women? One possibility is that with the additional free time, men would assume greater responsibility in these tasks. On the other hand, if gender roles and stereotypes regarding the distribution of domestic and care work do not change, it is possible that the gender gap in reproductive work would be reinforced (Bertrand et al., 2015). In other words, as women are the ones who today assume the majority of domestic and care work, they would likely also dedicate part of their additional free time to these tasks.⁵

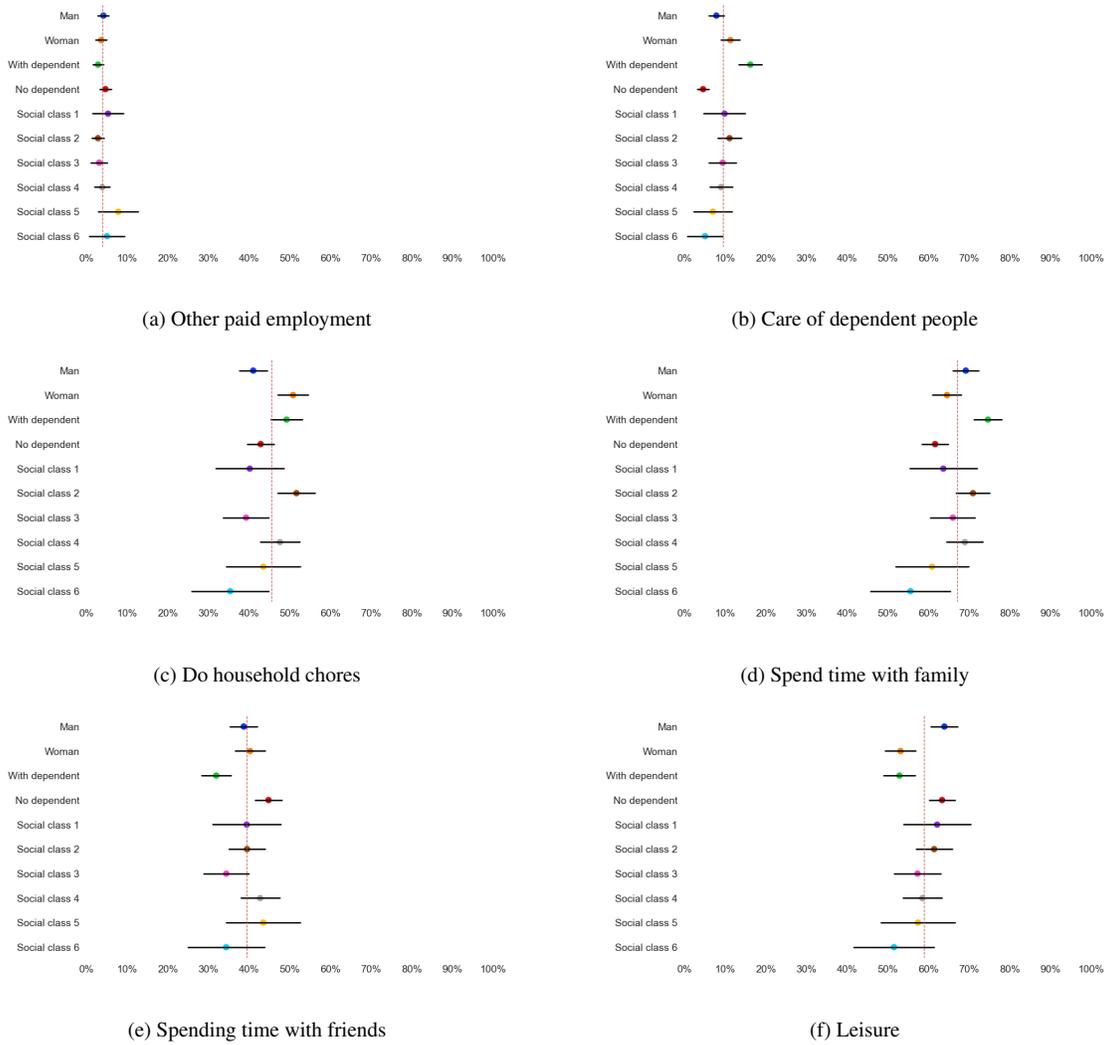
The data confirm that reducing working hours can reinforce gender patterns regarding the distribution of domestic and care tasks. Figures 19 and 20 disaggregate the results of Figure 13a into three categories: gender, responsibility for a dependent and socioeconomic level.

In graphs 19b and 19c we can see that women respond with a higher probability than men that they would dedicate the additional free time to care and domestic tasks. On the other hand, men say with higher probability than women that they would spend more time with the family (see figure 19d).

Men's responses also show that they are more likely to dedicate more time to leisure or doing sport than women (see Figures 19f and 20b), while women's responses show that they would use their free time to carry out activities that help improve their mental well-being and for learning new things (see Figures 20d and 20e).

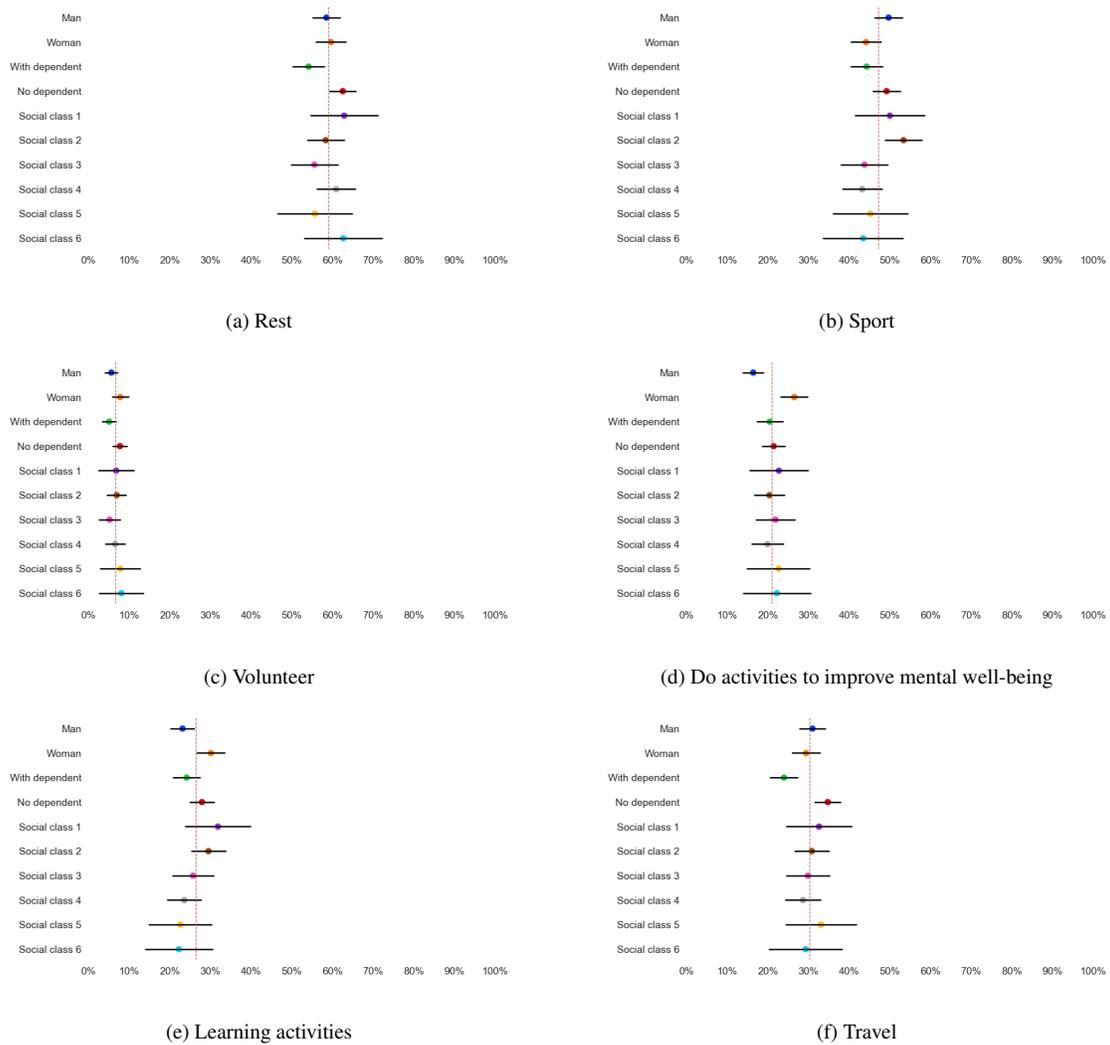
⁵In fact, analyses of the experience of confinement and teleworking during the COVID-19 pandemic in 2020 in Spain concluded that there was no increase in co-responsibility in the distribution of domestic and care work (Farré et al., 2022; Moreno-Colom, 2023)

Figure 19: How would you use the extra time resulting from this reduction in the working week?



Notes: The graph disaggregates by gender, dependent person and social class the responses to the question how workers would use their additional free time if the working hours were 32 per week. The information was collated from the responses given to question number 18 in the workers' survey.

Figure 20: How would you use the extra time resulting from this reduction in the working week?



Notes: The graph disaggregates by gender, dependent person and social class the responses to the question of what workers would dedicate their additional free time to if the working hours were 32 per week. The information was collated from the responses given to question number 18 in the workers' survey.

10 Can the 4-day working week help reduce the number of trips made?

One of the objectives pursued by the policy of reducing working hours is environmental sustainability in terms of urban mobility. In recent decades, with the growth of large cities, one of the great challenges that cities face is decarbonisation and the reduction of the carbon footprint generated by transport activity. For this reason, in recent years, the mobility system of cities has taken centre stage in public debate as a key element to improve air quality and living conditions. Thus, a multitude of policies and measures have been implemented in large Spanish cities, and also in other countries around the world, which encourage the use of more sustainable modes of transport or, alternatively, restrict the circulation of the more polluting vehicles. Also, measures such as teleworking have been used by companies and institutions to reduce the travel of their employees and thus reduce their CO₂ footprint.

In this section we analyse the potential effect that the reduction of one day of work in a working week would have on the mobility patterns of the workers interviewed. The possible effect that this could have falls into two categories: on the one hand, a reduction in the number of trips and, on the other, changes in mobility habits, i.e., replacing a privately-owned vehicle with public transport or other more convenient modes of sustainable travel.

In the first case, one would assume that going to work one day less a week would reduce the number of trips made in cities and, consequently, limit harmful emissions. However, having one more day off per week could reduce the number of trips to the workplace, but these citizens might take the opportunity to travel to places other than work.

In the second case, the lower number of working days could cause a change in the mobility habits of workers, encouraging them to start using more sustainable modes of transport, such as public transport, bicycles, etc. For example, an individual may decide to switch to a mode of transport that may be slower but less polluting if he or she has more free time. In this way, an even greater effect could be achieved on the reduction of emissions in cities by encouraging greater use of other modes of transport rather than privately-owned vehicles.

This section is organised as follows. First, we characterise the respondents' current mobility patterns. Second, we analyse whether during their day off they would do activities that involved

travelling. Third, we study whether working one day less would make them switch to less polluting modes of transport. In this last subsection we also look at the reasons for not using public transport.

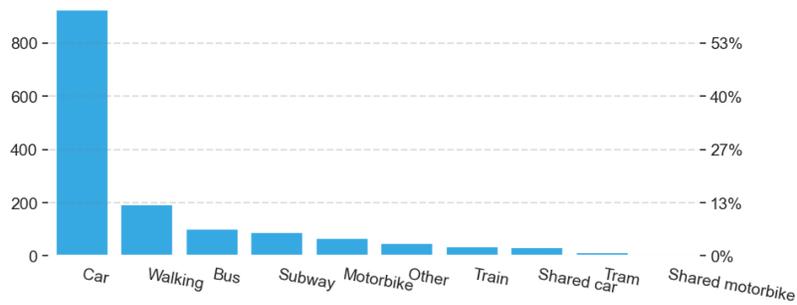
10.1 Characterisation of the mobility patterns of the respondents

Characterisation of the mobility patterns of the respondents is necessary in order to evaluate the benefits that could be achieved with the implementation of the reduction in working hours. This characterisation is important to ensure the sample is not skewed towards one type of transport over another, as this would affect the outcomes.

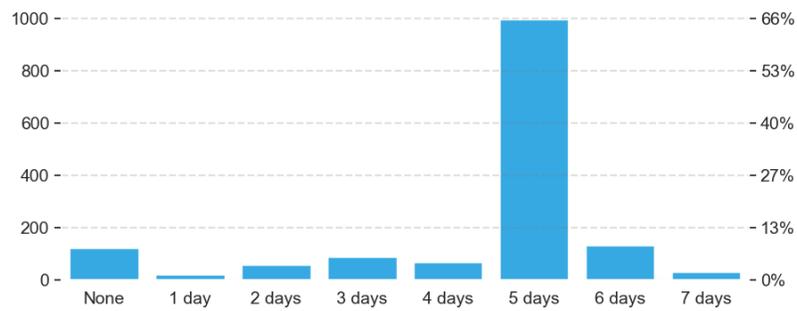
The results of the survey shown in Graph 21a indicate that around 61% of those surveyed use a privately-owned vehicle to travel. Furthermore, 66% of workers affirm that they travel 5 days a week (Graph 21b) and that around 70% make two trips (round trip), while 13% travel 4 times a day (Graph 21c).

Respondents' answers regarding the usual mode of transport, as well as the number and frequency of trips indicate that the 4-day policy offers ample opportunity to help reduce the number of trips and, consequently, emissions.

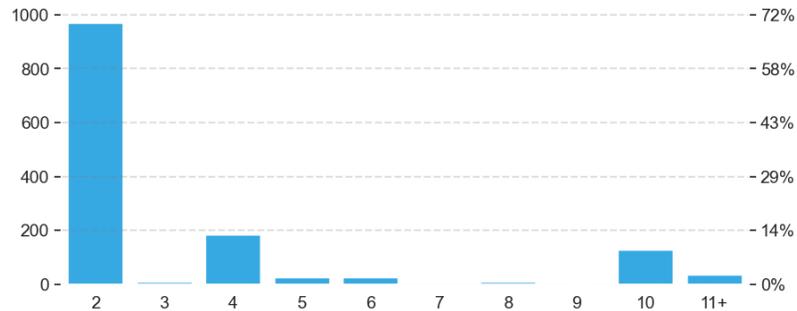
Figure 21



(a) What is the main means of transport you use when commuting to work?



(b) How many days a week do you travel for work?



(c) How many trips do you make during the day to go to work?

Notes: Panel (a) shows the means of transport that workers use to get to work, panel (b) the number of trips per week and panel (c) the number of trips per day. The information was collated from the responses given to questions numbered 31, 29 and 30 in the workers' survey, respectively.

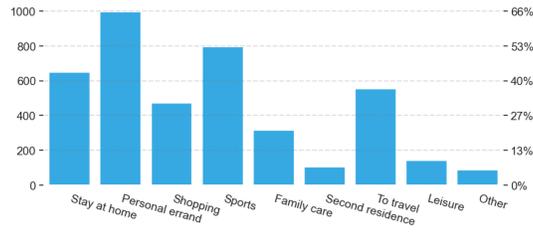
10.2 Would the number of trips be reduced?

Graph 22a shows the main activities that respondents state they would do on their day off. The most popular options are: taking advantage of the day off to sort out paperwork and bills, play sports, stay at home, travel, take a short break away or go shopping.

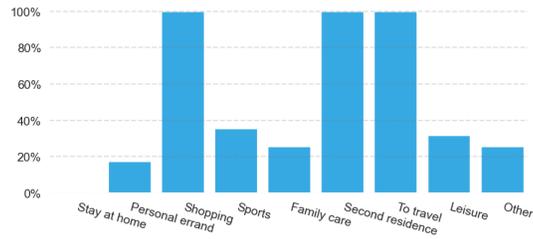
Next, we identify whether these activities would be carried out close to home (Graph 22b) and whether they would use a vehicle (car, train, plane, etc.) to do so (see Graph 22c). Clearly, for going shopping, visiting a second home and travelling, some form of transport would be necessary. In Graph 22c we see that at least 20% of the people who would carry out each activity would need to travel. In the case of travelling, taking care of family members or going to their second residence, 80% of the people who indicated that they would complete this activity confirm that they would need to travel by vehicle to be able to do so.

Therefore, part of the reduction in trips due to having a day off would be neutralised by trips linked to these new activities. However, the data suggest that the former would dominate and pollution would fall, since many of the new activities would not require travelling by some form of transport. In any case, it should be noted that it would be advisable to carry out a more detailed study that would take into account the kilometres travelled in each case.

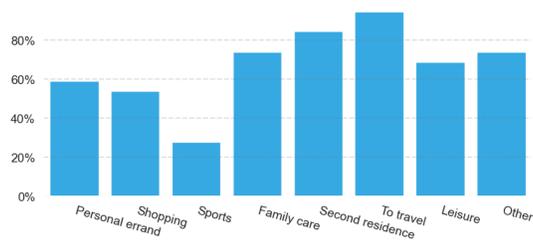
Figure 22



(a) If you had one extra day off a week, to what would you dedicate the time?



(b) Would you carry out this activity in a place other than your place of residence?



(c) Would you need to travel by vehicle?

Notes: Panel (a) shows what activities the workers would dedicate the extra day off to; panel (b) if they would do these activities outside their place of residence; panel (c) if they would need to travel by vehicle. The information was collated from the responses given to questions numbered 32, 32B and 32C in the workers' survey, respectively.

10.3 Would the use of sustainable means of transport increase?

Having more free time can facilitate the use of less polluting transport. To better understand this issue, we first establish that 53% of those surveyed confirm that they have access to different means of public transport to travel to work from their place of residence (Graph 23a). Of those who marked public transport as an alternative, the means most available to the vast majority of respondents are the bus, bicycle and metro (Graph 23b).

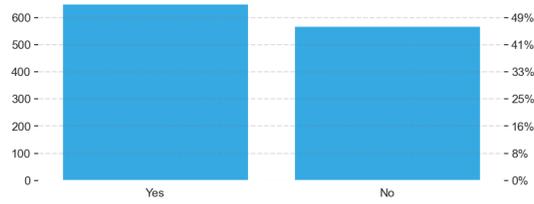
When asked about their willingness to use public transport given the possibility of reducing their working week to 4 days (Graph 23c), more than 33% of those surveyed responded that they would be willing. Therefore, the data suggest that working fewer hours can encourage changes in transport modes toward less polluting options.

Finally, graphs 24a and 24b explain what changes would be necessary to reinforce the use of public transport if the working week were to be reduced.

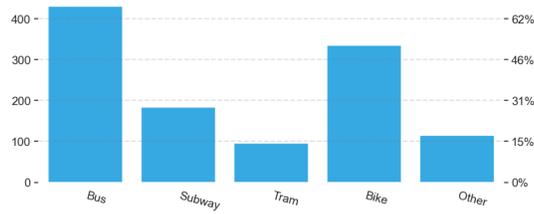
In graph 24a we see that many people do not use public transport because it does not meet their needs in terms of frequency or punctuality. Other reasons for not using public transport are: having to transfer mid-route, the need to take several modes of transport to get to their place of work, and not having a station or bus stop close to where they live.

Graph 24b shows that, if the frequency, punctuality, or cost improved, this would further increase the use of public transport.

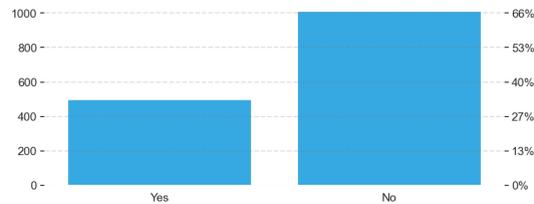
Figure 23



(a) At your place of residence, do you have the option of using public transport, travelling by bicycle or walking to your workplace?



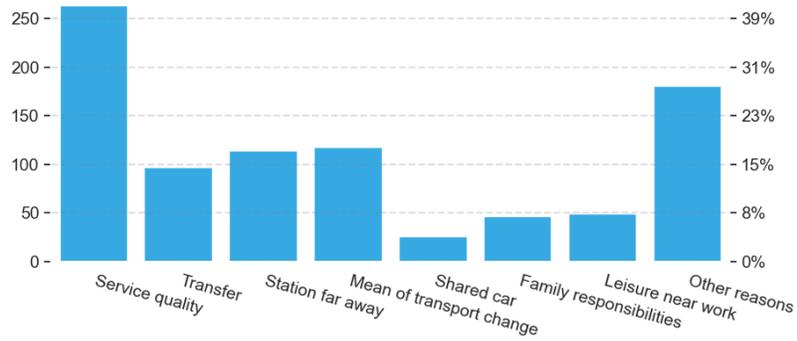
(b) Options available at the place of residence



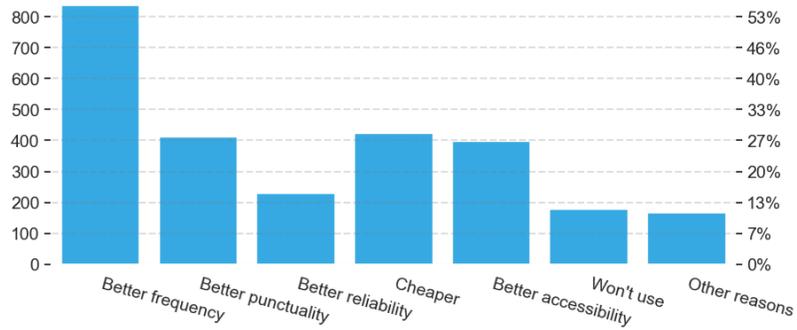
(c) In the case of reducing your working week by 1 working day, would you consider using public transport more when travelling?

Notes: Panel (a) shows whether workers have public transport at their place of residence. Panel (b) shows the public transport options available to them. Panel (c) reflects whether workers would use public transport more if they worked one day less a week. The information was collated from the responses given to questions numbered 33, 34 and 36 in the workers' survey, respectively.

Figure 24



(a) What are your reasons for not using public transport?



(b) What changes need to happen in public transport for you to decide to use it more?

Notes: Panel (a) shows the reasons why workers do not use public transport. The information is collated from responses given to question number 35 in the workers' survey. Panel (b) shows what changes need to happen in public transport to increase its use. The information was collated from responses given to question number 37 in the workers' survey.

11 The political implementation of the 32-hour working week

Reducing work time to 32 hours a week has the potential to bring about changes in many spheres of our society, which is why it is important to consider the correct political implementation of this change. We now go on to discuss the four basic elements for a successful execution of a change in the working week: sectoral learning, union proxies, gradualism and reinforcement of virtuous circles.

11.1 Sectoral learning, union proxy and gradualism

The legal change required to reduce the working week could be brought about by a change in the Workers' Statute that would set the new limit on work time. However, political action should not end there, since the change must be transmitted to different levels. In other words, the action of many social actors — such as central government, regional and municipal governments, employers and unions, companies and workers — is required for the legal change to bring about effective change in the everyday routine ([Lehndorff, 2014](#)).

To facilitate and achieve the participation of all actors, three objectives must be set: first, information and examples must be provided to companies in all sectors on how to achieve productivity improvements through organisational changes, with special emphasis on small and medium-sized companies; second, specific objectives and needs should be identified for each sector and for small, medium and large companies; third, the findings from the previous two objectives must be adapted to the level of each company. To achieve each of these objectives, we propose the following steps.

First, pilot studies to reduce work time should be introduced, and evaluated, in companies of different sizes and in all sectors. The objective would be to clarify which organisational changes could help companies of each type to increase productivity. These new practices would then serve as examples for other companies to follow when undergoing a legal change in working hours.

Second, dialogue between social actors at the sectoral level is necessary. In this way, the new knowledge acquired through the pilot studies can be transmitted and a conversation set up to help those companies which have not participated in the initial pilot studies and so have limited experience. Likewise, dialogue in each sector must serve to adapt the transformations according to the characteristics of each type of economic activity in order to meet the objectives or needs

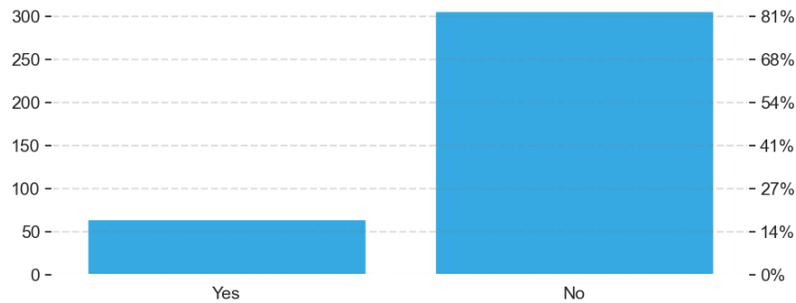
of each sector. For example, in some sectors the objective might be to take advantage of the reduction in work time to reduce workplace accidents, or another sector may foresee problems in attracting more qualified personnel to fill the newly created jobs necessary to maintain production. So, any reduction in working hours may require additional training or new ways of attracting more qualified workers.

Third, the knowledge acquired thanks to the pilot studies and sectoral negotiations needs to permeate all the business sectors. We cannot assume that this will happen automatically as a result of the other processes. The main reason for this is that most companies are small and medium-sized and do not have their own collective bargaining structure (Figure 25a).⁶ Therefore, in these companies there must be someone in charge of promoting the organisational changes needed to facilitate the reduction in the working week, such as was used in France when introducing the 35-hour working week: the union proxy (Lehndorff, 2014). This is a worker in a company without union representatives who receives the mandate of a local union to negotiate with his/her employer the organisational changes that are necessary.

Gradual change is necessary so that each of the three previous proposals has enough time to develop. In this way, companies and workers can gradually adjust to the new schedule, but without this meaning lengthening the transition process too much. Along these lines, Gomes (2021) develops a complementary reflection on the adjustment process.

⁶This is because the majority are small companies and would rather avoid the transaction costs related to negotiating their own collective agreement, preferring to adhere to the agreements in their sector (Bulfone and Afonso, 2020). Likewise, adhering to sectoral agreements serves to minimise industrial conflict and to ensure that the response to any deterioration in working conditions is universal among companies in the same sector.

Figure 25



(a) Is there a collective bargaining structure in the company?

Notes: The graph shows whether a collective bargaining structure exists in the company. The information is collated from responses given to question number 13 in the managers' survey.

11.2 Strengthening virtuous circles

Reducing work time is often presented as a policy that has the potential to achieve multiple beneficial effects; for example, reducing unemployment and pollutant emissions, or improving the distribution of domestic tasks between men and women.

In this section we point out that, in order to reinforce these types of virtuous circles, the reduction in working hours must be accompanied with other policies. It is not our aim to develop a detailed list in this regard, but we offer a couple of examples based on the evidence that has emerged from the surveys.

Firstly, in section 8 we explained that a high percentage of companies consider that they would need to employ more personnel and that this would be complicated by a shortage of labour with the necessary qualifications. It is crucial, therefore, to consider how this can be alleviated by identifying the occupations that would experience a greater increase in demand and design educational policies that help facilitate the employment and training of these workers. This is an example of how actions in the educational field can help ensure that the reduction in working hours does not negatively affect production and, in turn, unemployment can be reduced and the productive capacities of the workforce increased.

Secondly, in section 10 we saw that limiting the working week to 4 days has the potential to reduce emissions linked to commuting. Not only would fewer trips be made, but it would also

favour the use of less polluting means of transport. In this sense, accompanying the reduction in work time with improvements in public and sustainable transport infrastructure would reinforce the virtuous circle of less work and fewer transport emissions.

12 Conclusions

The objective of this study has been to understand the possibilities and limitations of a reduction in work time to 32 hours per week while maintaining the same salary. To do this, we analysed the results of a survey of 371 company managers and one of 1,508 workers. The conclusions can be grouped into five main points.

First, we address the impact that a reduction in work time would have on the tasks that workers perform on a weekly basis. 31% of companies think that the number of tasks would increase and 29% believe that it would remain stable. Therefore, for the majority of companies in the Valencian Community, reducing working hours would increase productivity.

However, 40% of companies do expect a negative effect on the number of tasks. It is for this group, therefore, where the policy for reducing working hours first needs to generate sectoral and business knowledge about the organisational, technological and human capital changes necessary to facilitate the transition in these companies.

Second, to generate this knowledge, key elements, such as pilot studies in companies in all sectors, collective bargaining at the sectoral level and union proxies, are essential for the transition to be well executed. Likewise, a certain gradualism is necessary for the new knowledge to permeate all the business sectors.

Third, with correct implementation of the change, the reduction in work time is expected to increase employment. There are three reasons for this. First, according to our surveys, the demand for some sectors such as leisure, tourism, education and sports would increase. Second, technological unemployment would be reduced. Third, 80% of companies consider that they would have to hire more workers for certain positions. Therefore, to help in the transition, training policies should be proposed to adapt the supply of workers to the new jobs that would be created.

The fourth point suggests there is a clear social demand on the part of workers for a reduction in work time. 71% consider that the reduction would help very much to reconcile with the other

aspects of their life and 26% think that it would help them somewhat. Furthermore, this demand is transversal by gender, carers of a dependent person and socioeconomic level. The reduction would mainly benefit between 29-37% of workers who express a more acute lack of time to be with their family, to take care of their own physical and mental health, to rest or to follow personal goals.

Both employers and workers prefer that in a 32-hour working week they work one day less. In the case of workers, the results are very similar when disaggregated by gender or by carers of a dependent person. In the case of employers, they express a clear preference that the additional day off not be the same for all workers.

The fifth and final point is that, to enhance the virtuous circles that the policy of reducing work time could generate, other measures must also be introduced. For example, the data suggest that reducing the working week would emphasise the gender gap, so a change in hours should be accompanied by cultural changes regarding gender roles. With regard to transport, the survey suggests that working less would reduce harmful emissions, but this change could be reinforced by improvements in the public transport network and use of greener vehicles.

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