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**Working Paper**

## Teleworking in the French Private Sector: A Lasting but Heterogenous Shift Shaped by Collective Agreements (2019-2024)

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## ABSTRACT

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# Teleworking in the French Private Sector: A Lasting but Heterogenous Shift Shaped by Collective Agreements (2019-2024)\*

Teleworking has been widely adopted in France since the Covid-19 crisis. This study traces its evolution from 2019 to late 2024, using worker and employer surveys, firm agreements, and administrative sources. After peaking during lockdowns, telework stabilized at 23% of the private workforce, mainly among managers, with no recent signs of decline. Textual analysis of agreements shows a dominant hybrid model of two days per week, confirmed by the Labour Force Survey, with most workers satisfied. Telework correlates with firm characteristics (more common in large firms), job composition (managers influence non-managers), housing (larger homes, longer commutes), and individual or household traits (men telework less, partner's telework increases likelihood), highlighting key telework dynamics. These correlations hold under different specifications, including firm fixed-effects models.

**JEL Classification:** L23, J52, J81

**Keywords:** telework, firm agreements, gender, family, housing

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# Introduction

Following the COVID-19 health crisis, telework has emerged as a major transformation in work organization within companies. Initially adopted urgently in early 2020, telework has persisted beyond lockdowns, marking a lasting shift. Previously a marginal practice, though slightly increasing with to the development of digital tools, the pandemic enabled a massive and rapid expansion. The willingness of workers to adopt this work mode, coupled with companies' adaptation, has made telework a sustainable phenomenon.

Although telework is a global phenomenon, its development presents national specificities. Unlike countries such as the United States, where full remote work is more common, the hybrid model is dominant in France. By late 2024, 13% of full-time workers in the U.S. were fully remote, 61% were full-time on-site, and 26% were in a hybrid arrangement. In contrast, fewer than 3% of private-sector workers in France were fully remote in 2024, with 78% working on-site and almost 20% in a hybrid arrangement.

Furthermore, telework (both hybrid and full remote) in France is regulated by statutory law, regulatory law, and collective bargaining agreements. The legislative framework was revised shortly before the pandemic and emphasized firm collective agreements (Ordinance of September 22, 2017, on predictability and security in labour relations) to support telework deployment and long-term integration. The distinctiveness of the French case lies in tracking the evolution of telework within collective agreements that are mandatory communicated to the French ministry of labour. This more regulated adoption allows for observing structural effects on how companies manage and structure telework.

In addition, the construction of numerous surveys has enabled real-time tracking of the consequences of the health crisis on French companies and workers. Since the end of the health crisis, as in other countries, a permanent statistical apparatus allows for tracking the evolution of telework through new sources or enhancements to existing surveys among companies and workers, notably the French Labour Force Survey.

The growing availability of detailed telework data in many countries has fuelled academic research on its various effects, such as pollution, health, well-being and job satisfaction, gender inequalities, the real estate market, and fertility during and after the pandemic in many countries (e.g. Sepanta et al. (2024), Beatriz and Erb (2024b), Gueguen and Senik (2023), Castro-Trancón et al. (2024), Mofakhami et al. (2024), Maheshwari et al. (2024)). The impact of telework on productivity has been particularly explored (Bloom et al. (2024), Bergeaud et al. (2023), Bergeaud et al. (2024), Perelman et al. (2024)).

This paper aims to provide a comprehensive portrait of telework in the private sector post-pandemic in France, integrating multiple dimensions: company characteristics (sector, size...), collective agreements, job attributes (occupation, tenure...), individual employee characteristics (gender, age, partner also teleworking ...), and housing conditions (home size, commuting distance...). It relies on quantitative data from both employee and employer surveys, as well

as a novel LLM-based textual analysis of a vast corpus of firm agreements. These data are matched with administrative sources on companies and housing conditions.

After a peak during lockdowns, the proportion of teleworkers—of whom a large majority are managers—has stabilised at around 23% of the private workforce in 2023 and 2024, with no statistical evidence of decline, despite numerous media reports questioning the practice. Most of them work from home, but still about one in five home workers does not telework. The persistence of telework is accompanied by collective agreements that establish a hybrid telework model of around two days per week. A probit model shows that telework is correlated with many dimensions from firm to housing characteristics. In particular, telework is less prevalent in small and medium-sized firms, whereas it is more common in multinational companies. A higher proportion of managers within a company seems to have a trickle-down effect, encouraging telework among non-managers within the same organisation. Larger housing spaces and longer distances from the workplace are associated with a higher likelihood of telework. A striking point is that women also engage in telework significantly more than men, although no correlation is observed between telework and the presence of young children, even for women. However, having a partner who also teleworks is associated with a higher likelihood of practising telework oneself. Age shows an inverted U-shaped pattern, with the highest levels of telework among workers aged 30–35.

This portrait resonates with research on the effects of telework on productivity, work organization, and work-life balance, and may encourage exploring complementary avenues.

The paper is organized as follows. The first section presents examples of sources in selected countries, then details the main sources on telework in France before, during and after the pandemic, including our original database on collective agreements. Section 2 describes the main trends in telework - share of workers, number of days, by main occupation and by industry - as well as the dynamics and content of collective agreements in France. Section 3 presents the basic probit model, the complementary sources, the main results and the sensitivity analysis on different samples, for different specifications, including a linear estimation with a fixed effect on the enterprise. The last section concludes.

## 1 Enhanced Sources on Telework Since COVID

Even though pre-existing surveys addressed telework, new databases and expanded statistical tools have emerged since 2020 to measure telework practices. This section provides examples, particularly from the United States and Europe, before presenting the French sources used to develop our portrait of telework and teleworkers in the private sector.

## 1.1 An International Effort

Several databases have been used to track the long-term trends in telework in the United States (Barrero et al. (2023)). Before the pandemic, telework was a relatively marginal practice. In 2019, only 7% of working days were performed telework in the U.S., compared to 28% in mid-2023. This practice was already on an upward trend before the pandemic, as telework accounted for only 3% of working days in the 1990s and less than 1% in the 1960s. The COVID crisis accelerated and intensified this trend. By mid-2023, 28% of workdays were carried out from home, four times as many as in 2019. In 2023, 41% of U.S. workers practise some form of telework, with 12% working fully remotely. Thus, in the United States, full-time telework is much more prevalent post-COVID compared to the situation in France.

The changes in telework patterns in the United States are tracked using multiple databases.

- **American Heritage Time Use Study (AHTUS)**, an annual survey on American households conducted by the Bureau of Labor Statistics, covering the period 1965-1998, with a focus on home-based work. It is a longitudinal time-use survey measuring the distribution of work and leisure activities.
- **American Time Use Survey (ATUS)**, an annual survey on American households conducted by the Bureau of Labor Statistics for the period 2003-2019, estimating the number of days worked from home versus those worked on-site.
- **Survey of Working Arrangements and Attitudes (SWAA)**, a telework-specific survey developed by Nicholas Bloom and co-authors, providing monthly telework data since 2020. The sample includes more than 30,000 respondents in the United States.
- **Census Household Pulse Survey (HPS)**, a quarterly survey conducted by the U.S. Census Bureau in response to the COVID-19 pandemic in April 2020, designed to provide real-time data on the social and economic impact of COVID-19 on households (living conditions, health, education, telework...).
- **General Social Survey (GSS)**, a biannual national survey created in 1972 on worker behaviour, including the frequency of telework.

In an international comparison, before the pandemic, the study by Eurofound and ILO (2017) on working conditions provided comparative data on telework in OECD countries. Two European databases existed: the 2015 European Working Condition Survey for harmonized data on remote work and the Labour Force Survey (LFS) for harmonized data on home-based work. The advantage of the Labour Force Survey is that it provides annual data from 2014 onward, continuing during and after the health crisis. According to LFS, in France, the share of employed adults working from home rose from approximately 20% before the health crisis to 33.7% in 2023, peaking at 34.5% in 2021 (compared to 13% before the health crisis and 21.4% in 2023 on average in the European Union).

The EWCS 2015 contains harmonized data on remote work in Europe based on a sample of over 43,000 workers. In the European Union, in 2015, about 17% of workers engaged in some form of telework (12% in France), while in the United States, 37% of workers reported teleworking in 2015 (based on the GSS).

During the health crisis, the OECD used several national databases and empirical studies to analyse the evolution of telework in an international comparison (OECD (2021)). These mainly included the LFS database on workers' side and regular surveys on the economic situation of businesses or the use of ICTs (Australia or Canada) or specific surveys to measure the impact of the pandemic on telework (United Kingdom or Italy) from employers' perspective.

Also, since the beginning of the pandemic, the Survey of Working Arrangements has been developed as an occasional survey in 2021, 2022, and April-May 2023 of individual workers across more than two dozen countries (the Global Survey of Working Arrangements). According to this report (Aksoy et al. (2023)), in 2023, on average in 34 countries, 26% of employees worked in a hybrid mode (32% in the United States compared to 25% in France) and nearly 8% worked entirely from home (9% in the United States and 7% in France). This survey included nearly 2,500 workers in France (30,000 respondents in the United States), raising concerns about the robustness of the results. However, the study allows for international comparisons based on an identical questionnaire.

The lack of a clear definition of telework before the health crisis makes it difficult to compare different surveys. Home-based work or remote work can serve as proxies for telework, although home-based work tends to overestimate the share of teleworkers. Nevertheless, these databases show that telework was likely increasing before 2020, although unevenly distributed across countries.

Since the start of the health crisis, the International Labour Organization has clarified the differences between the four concepts, remote work, telework, work at home and home-based work (ILO). It defines remote work as a work performed fully or partially outside the workplace, such as at home or in a co-working space, without necessarily requiring ICT. It simply means working from a location other than the usual workplace. In contrast, it defines telework as "a subcategory of the broader concept of remote work. It includes workers who use information and communications technology (ICT) or landline telephones to carry out the work remotely. Similar to remote work, telework can be carried out in different locations outside the default place of work. What makes telework a unique category is that the work carried out remotely includes the use of personal electronic devices". This concept has been adopted in Labour Force Surveys and throughout this document. In the French labour force survey questionnaire, telework is mentioned as involving working outside the employer's premises during regular working hours. It requires the ability to connect to the company's IT system and must be formally agreed upon in a writing with the employer. According to the French labour force survey, bringing work home, working during business trips, at a client's location, in a mobile manner (e.g., during commutes or between meetings), or at a remote company site does not



constitute telework. The other concept use are work at home, defined as a work done fully or partially from the worker’s own home, whether or not it involves ICT (it includes both employees and self-employed individuals working from their residence) and home-based work defined as a subcategory of work at home where the worker’s home is their primary and consistent workplace (it applies to both employees and independent workers whose job is permanently based at home).

## 1.2 Main Surveys of French Public Statistics

In France, public statistics had already been interested in telework before the health crisis but have since strengthened their monitoring with to the rapid development of this practice. Several surveys conducted by Dares (Ministry of Labour) and Insee now allow for detailed and regular tracking, both at the employee and company levels<sup>1</sup>.

- **Sumer Survey (Medical Monitoring of Risks, 2017).** Conducted by Dares among 26,500 salaried workers monitored by more than 1,200 occupational physicians in the private sector, this survey provides insights into the situation before the labour agreement reforms. In 2017, 3% of salaried workers regularly teleworked at least one day per week.
- **Working Conditions Survey (CT 2019).** Conducted by Dares, with 25,000 salaried workers, this survey also includes an employer component for 20,000 of them. The two components allow for an estimation of both the proportion of teleworkers and the number of telework days by teleworker before the Covid-19 shock. The data collection ended one week before the first lockdown, meaning it was not impacted by the health crisis.
- **Acemo-Covid Survey (April 2020 – April 2022).** Conducted by Dares, the purpose of this survey is to analyse how companies responded to the health and economic consequences of Covid-19. In particular, it asks employers about the proportion of teleworkers and the number of telework days by teleworker. Acemo-Covid is a monthly survey sent to managers, with approximately 15,000 respondents per wave. Only establishments of firms with at least 10 salaried workers are surveyed. A unique establishment identifier (SIRET/SIREN) is available for the observations.
- **Continuous Employment Survey, or French Labour Force Survey (LFS).** The French version of the European LFS and the reference for labour force statistics, conducted by Insee, this survey has been enhanced with a telework component. Conducted quarterly by Insee, it surveys 80,000 households, with a sample renewal rate of one-sixth. Since 2021, the first-round questionnaire includes questions on both the proportion of teleworkers and the number of telework days by teleworker (Jauneau (2022), Émilie Pénicaud (2024)). From the third quarter of 2022, additional questions have been introduced regarding the

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<sup>1</sup>Detailed descriptions of these surveys and related studies are available on the websites of Dares and Insee

feasibility of telework for a given job and employee satisfaction with telework. The survey also provides the establishment identifier (SIRET) of the employee's workplace.

- **Tracov 1 (2021) and Tracov 2 (2023) Surveys.** These surveys, conducted by Dares, include highly detailed questions on the working conditions of nearly 20,000 employed individuals during the health crisis in early 2021 and again in 2023. They help measure the use of telework, even on a very occasional basis, and assess its impact on health conditions since Covid-19 (Beatriz et al. (2022), Beatriz and Erb (2024a)).
- **Reponse Survey (Professional Relations and Company Negotiations, 2023).** This survey, conducted by Dares, includes three components: employer, employee representative, and employee. Covers more than 4,000 establishments with more than 10 employees in the private sector. Employees are asked about their telework practices in 2022, while company representatives are asked about the implementation of telework. Both management representatives and employee representatives are surveyed about negotiations and discussions related to telework.

### 1.3 Using a Textual Analysis Method to Build an Extensive Database of Firm Agreements

In France, telework is defined by the labour code as "any form of work organisation in which work that could also have been carried out on the employer's premises is carried out by an employee away from those premises on a voluntary basis, using information and communication technologies".

**Collective agreements: A common approach for implementing telework.** Firms (including private associations) have three legal options to implement telework.

Employers can first negotiate a collective agreement with employee representatives, defining a common framework for all employees. In the absence of such an agreement, the employer, after consulting the Social and Economic Committee (staff delegates), can establish a charter applicable to all employees. Finally, telework can be implemented on an individual basis through an agreement between the employer and each employee; if no collective agreement or charter exists, the agreement between the employee and employer must be formalized.

The full texts of collective agreements are submitted digitally and checked by the *Direction Générale du Travail* (DGT)<sup>2</sup>. Since 2017, these texts are freely available on the website Légifrance, the official website for publishing French laws. Moreover, based on DGT data, Dares produces a statistical database of firm agreements, which includes consolidated data indicating, for instance, the categories of signatories, the validity periods, and the themes of each agreement, specifically including telework.

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<sup>2</sup>While texts provided by firms are mostly agreements or amendments to agreements, some are unilateral employer decisions, disputes, or agreement terminations.

A collective agreement related to telework (such as a charter) must specify: the conditions for transitioning to telework, including the staff categories eligible or excluded, as well as the conditions for discontinuation; the terms of employee acceptance; the methods for monitoring working hours or workload by the employer; the determination of time slots during which the employer can normally contact the teleworker; and the access arrangements for disabled workers.

**Textual analysis of collective agreements.** Advances in text analysis now allow for deeper insights. Information can be extracted from long documents such as firm agreements. Specifically, large language models (LLMs) like Mixtral or GPT-4 can reliably extract numerical information from textual data.

In this study, we used the Mixtral-8x7b-instruct model to extract the maximum number of telework days per week. The algorithm was configured to detect if there is any mention of a number of telework days per week (or month, quarter, ...). If the number of days was specified for a period other than a week, such as a month, it was converted to a prorated weekly equivalent. If distinctions were made based on managerial status, geographic location, or commuting distance, the highest maximum was retained. However, specific arrangements for pregnant women, workers recognized as disabled workers, or senior employees were not considered.

The model also highlights relevant passages from the text. Based on the sample of 151 firm agreements compiled by Pesenti (2022), we evaluated the model’s performance without additional training, achieving an accuracy of 77.5%.

Subsequently, the model was applied to all agreements signed between 2017 and 2022 by establishments or companies in the Acemo-Covid sample. The raw AI outputs underwent at least one ex-post verification, conducted by the research team using the LabelStudio annotation tool, following a standardized guideline for validating or correcting the results. The verification interface displayed the AI-generated result alongside the paragraphs describing the telework conditions.

Since most of the extracted passages were relevant, the primary task of the reviewers was to verify that the extraction of the maximum number of teleworkdays was correct. Some cases required discussion regarding the exact number to extract with to the complexity of company rules defining the number of telework days per week.

## **2 Hybrid Work: A Practice Now Embedded in French Companies**

This section provides an overview of the evolution of telework in companies from 2019 to 2024.

## 2.1 Telework in 2019: A Still Marginal Practice

According to the 2019 Working Conditions Survey (CT 2019), around 4% of employees practised telework regularly, meaning at least once a week in 2019. It was more common among managers and professionals (14%) than among manual and office workers (less than 1%). In the vast majority of companies, telework was marginal. However, it varied significantly across sectors, partly due to differences in employment structure. Telework was more prevalent in the finance and information-communication sectors, where the proportion of managers and professionals is high. In these sectors, 61% and 66% of workers, respectively, worked in a enterprise where more than 2% of employees engaged in regular telework. Conversely, it was almost non-existent in the accommodation and food services sector, where executives are less represented, with companies having more than 2% of teleworkers accounting for only 10% of salaried employment.

## 2.2 Peaks During Lockdowns

To measure telework since the health crisis, we primarily use the Acemo-Covid database (surveying employers) and the Continuous Employment Survey (French LFS, surveying employees)<sup>3</sup>. These sources enable quarterly monitoring from the onset of the health crisis through the third quarter of 2024, based on representative samples of companies and employees. In both cases, respondents were surveyed about their telework practices during a clearly defined monthly or weekly period. Across a similar scope (companies with more than 10 employees), the Acemo-Covid (managers) and French LFS (employees) data are consistent: approximately one in four private-sector employees (in companies with more than ten employees) was teleworking in the first quarter of 2022. The two surveys also provide comparable results on other dimensions of telework, such as intensity, sectoral breakdown, and company size distribution.

A common trend is observed in the proportion of private-sector employees teleworking between the Acemo-Covid dataset (quarterly averages) and the Continuous Employment Survey (French LFS) from the first quarter of 2021 to the fourth quarter of 2021. In the last two quarters common to both datasets (Figure 1), the results are nearly identical between the two sources.

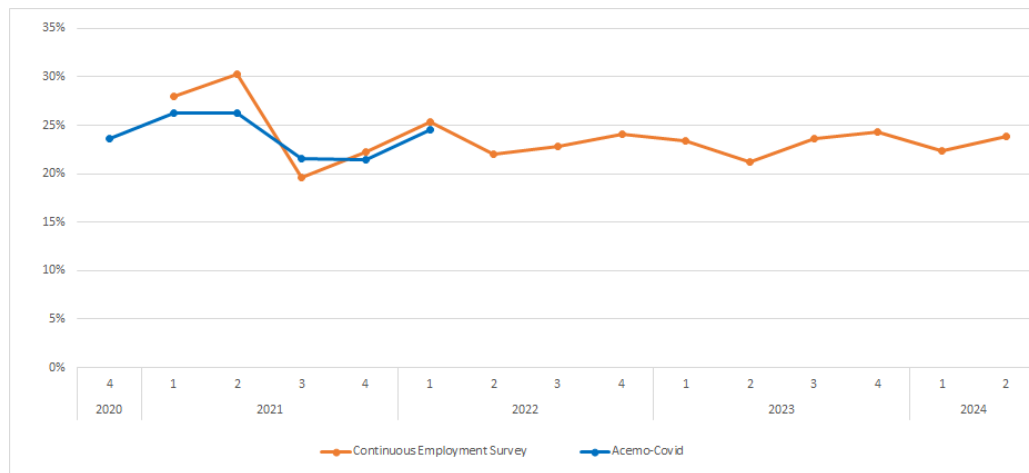
More specifically, according to Acemo-Covid, telework surged with the health crisis: approximately three out of ten private-sector employees telework during the last week of March 2020, at the peak of the crisis (**sources**). This proportion was never reached again after the first lockdown. Telework intensity was measured more precisely in surveys starting in November 2020 in private establishments with more than 10 employees. After reaching peaks of 27% and 28% during the November 2020 and April 2021 lockdowns, the proportion of employees teleworking at least one day per month stabilized above 20% until the end of the health crisis in early 2022.

Telework intensity was higher during lockdowns: in November 2020, 44% of teleworkers were working entirely from home, dropping to 35% in April 2021 and only 5% by March 2022

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<sup>3</sup>A comparison between French LFS and the Tracov survey is presented in Appendix A.

Figure 1: Proportion of employees teleworking in companies with 10 or more employees from 2020 to mid-2024 (%)



*Scope: Employees of private enterprises with 10 or more employees, residing and working in France, excluding Mayotte.*

*Reading: According to French LFS, 25.4% of employees teleworked at least once during the 1st four weeks in the first quarter of 2022. According to Acemo-Covid, on average, 24.6% of employees teleworked at least one day per month during the first quarter of 2022.*

*Source: Insee, French Labour Force Survey; Dares, Acemo-Covid survey.*

after the relaxation of health restrictions.

## 2.3 The Persistence of a Hybrid Work Organization Meeting Workers' Preferences

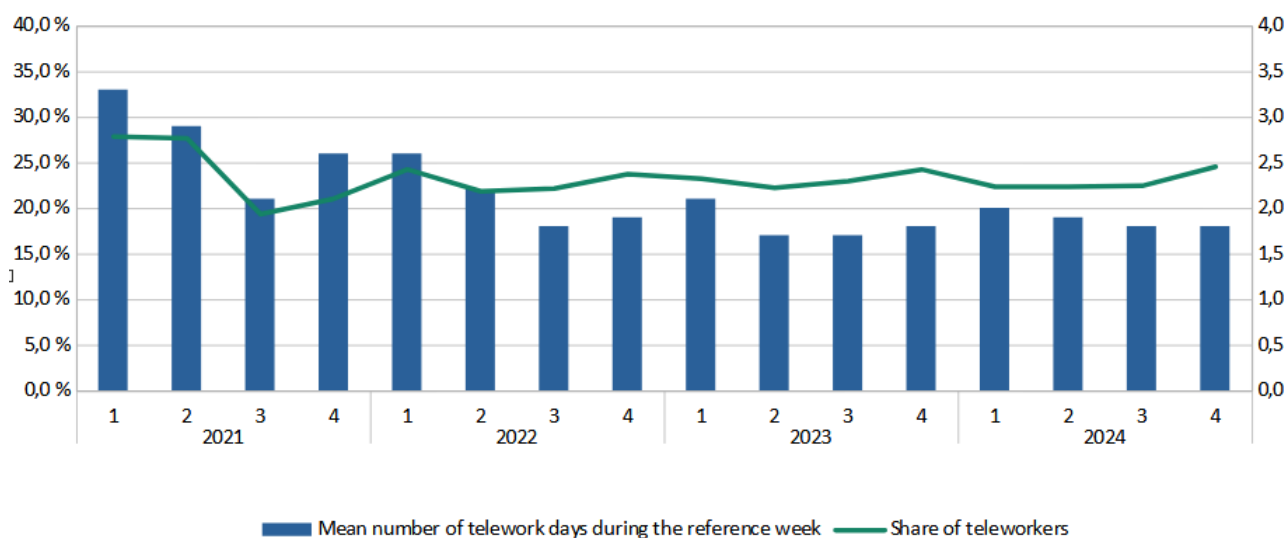
Across the entire private-sector workforce, the Continuous Employment Survey (French LFS) shows a stabilization in the proportion of teleworkers starting from the second quarter of 2022. Telework has thus entered a permanent regime. Even the most recent data from the 2024 Employment Survey confirm this trend: in the first half of 2024, 22% of private-sector employees teleworked at least once in the four weeks preceding their survey response. By the last quarter of 2024, according to preliminary French LFS data, the proportion of teleworkers reached its highest level since the end of the state of emergency in France (June 2022).

The French LFS also asks workers if they consider their job as teleworkable even if they do not actually telework<sup>4</sup>. Nearly 7 out of 10 employees who consider their job teleworkable engage in telework.

The trend in the intensity of telework — measured by the number of telework days — shows two distinct phases. At the beginning of 2022, Acemo-Covid and French LFS once again provide a consistent picture. According to French LFS, which allows for tracking the average number

<sup>4</sup>This approach of "teleworkable" differs from one based typical tasks content of occupations according to their detailed name or classification number.

Figure 2: Proportion of Private Sector Employees in Telework and Average Number of Telework Days in the Reference Week. Q1 2021-Q4 2024



*Scope:* Employees of private or public enterprises residing and working in France, excluding Mayotte.  
*Reading:* In the last quarter of 2024, 25% of private-sector employees teleworked at least once in the four weeks preceding the survey, with an average of 1.8 day in the reference week.  
*Source:* Insee, French Labour Force Survey, non-seasonally adjusted, preliminary Q3 and Q4 2024 data.

of telework days per week per employee<sup>5</sup>, the average number of telework days per week was 2.4 days in the first quarter of 2022 (for employees who teleworked during the reference week in companies with 10 or more employees).

According to Acemo-Covid, which provides a breakdown of teleworkers based on their weekly practices (i.e., the proportion of teleworkers by number of days teleworked per week)<sup>6</sup>, in the first quarter of 2022, 7.6% of employees teleworked only a few days or half-days per month, 17.0% one day per week, 30.3% two days per week, 28.4% three days per week, 10.7% four days per week, and 5.9% the entire week. In the majority of cases (58.7%), telework was practised two or three days per week on average in the first quarter of 2022.

The French LFS allows for extending the analysis until the end of 2024 across the entire private-sector workforce. The number of telework days per reference week declined during 2022 before stabilizing in 2023. Throughout 2024, it fluctuated between 1.8 and 2.0 days per week in winter. Less than 15% of teleworkers (or fewer than 3% of private-sector employees) were in full remote work during the reference week. Among them, more than half teleworked an

<sup>5</sup>The exact question in the Employment Survey (French LFS) is: "During the reference week (in your main job), how many days did you telework?" Expected response: whole or half numbers.

<sup>6</sup>The exact question in the Acemo-Covid survey between November 2020 and April 2022 was: "If employees teleworked in the previous month, what was their distribution among the following categories?" Response options: A few days or half-days per month/One day per week/Two days per week. Three days per week/Four days per week/Five days per week.

average of no more than two days per week over the month, suggesting an alternating rhythm between in-office and telework weeks.

These observations describe a persistent hybrid work model centred around an average of two days per week. This proportion corresponds to the "optimal" level for productivity in companies, according to some studies (e.g., Bloom et al. (2024), Bergeaud et al. (2023)).

Another indicator of the entrenched nature of telework is that, according to French LFS data, between mid-2022 and mid-2024, only 11% of employees in teleworkable jobs were prevented from teleworking, half of them due to employer restrictions. Additionally, one in five employees with a teleworkable job chose not to telework. Only, one in five employees who teleworked in the previous four weeks would have preferred to do so more frequently and one in twenty wanted to reduce their telework days.

Finally, according to the French LFS, almost all private-sector employees who teleworked in the previous month also worked from home during this period. However, one in five employees who worked from home were not classified as teleworkers. This proportion is higher among office workers, with a total of 8% having worked at least a few hours from home without being classified as teleworkers. While working from home overlaps with telework, it is a broader category.

Table 1: Distribution of Salaried Workers by Telework and/or Work-from-Home Practices. Q2 2022 to Q2 2024 (%)

	Work from Home	
	None	At least a few hours
<b>Non-teleworker</b>	71.6	5.4
<b>Teleworker</b>	0.4	22.6

*Scope: Salaried workers of enterprises residing and working in France, excluding Mayotte.*

*Reading: 5.4% of employees worked from home during the previous month but were not classified as teleworkers.*

*Source: Authors' calculations based on French LFS 2022-2024.*

## 2.4 A Predominant Practice in Finance, Information-Communication, and Among Executives

The consistency between sources and the stability in findings are clear when comparing the proportion of teleworkers by sector or by the size of their legal units. Whether from employer or employee surveys, the larger the legal unit, the higher the proportion of teleworkers, although the number of telework days in the week does not necessarily increase. According to Acemo-Covid, in Q1 2022, in legal units (LU) with 500 or more employees, more than 30% of employees teleworked at least one day per month, compared to only 13% in LUs with 10 to 19 employees

(versus 32% and 19% in the French LFS, respectively, on a similar scope). At the same time, the proportion of employees teleworking three or more days per week was identical (29%) in LUs with more than 500 employees and those with 10 to 19 employees (Acemo-Covid). The average number of telework days also does not vary significantly with LU or company size in the French LFS.

Both surveys indicate that telework was most prevalent in the same sectors at the beginning of 2022 as it was in 2019. The highest proportion of teleworkers was observed in the information-communication sector (77% in Acemo-Covid, 79% in the French LFS) and in financial services (62% in both surveys) in Q1 2022. Telework intensity was also higher in information-communication: 46% of employees teleworked three or more days per week in March 2022, compared to 27% across all sectors (Acemo-Covid). According to the French LFS, the average number of telework days was also higher in this sector: 2.9 days per week in Q1 2022 versus 2.4 across all sectors.

In the post-health emergency period, the French LFS shows that the proportion of teleworkers remained high in the information-communication and financial services sectors, at 75% and 60%, respectively. Moreover, in the information-communication sector, teleworkers averaged 2.3 days per week, compared to 1.8 days per week in other sectors.

Using Insee’s economic definition of enterprise categories<sup>7</sup>, 18% of employees teleworked at least once per month in SMEs (excluding microenterprises), 26% in intermediate-sized enterprises (ETIs), and an even higher 34% in large enterprises (LEs), due to their international structuring. In fact, telework was more prevalent in larger companies, which are more frequently multinational corporations. In multinational companies, whether French or foreign and regardless of size, more than 30% of employees telework. However, telework intensity in large enterprises is slightly lower, averaging 0.1 days fewer than in other companies.

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<sup>7</sup>From an economic perspective of analysing the productive system, Insee defines the enterprise as the smallest combination of legal units that constitutes an organizational unit producing goods and services with a certain degree of decision-making autonomy, particularly regarding resource allocation. Four categories of enterprises are defined based on the number of employees, revenue, and total balance sheet: small and medium-sized enterprises (SMEs), including microenterprises which employ less than 250 persons, intermediate-sized enterprises (ETIs) with between 250 and 4,999 employees, and large enterprises (LEs) has at least 5,000 employees.



Table 2: Telework Adoption by Occupational Category Between Q3 2022 and Q2 2024

Occupational	Teleworkable Share (%)	Telework Adoption (%)	Telework Days / Week
<b>All Executives and Higher Intellectual Professions</b>	80	63	1.9
Liberal Professions	47	18	1.3
Professors and Scientific Professions	51	30	1.6
Information, Arts, and Entertainment Professions	57	43	2.2
Administrative and Commercial Executives	84	66	1.9
Engineers	84	69	2.0
<b>All Intermediate Professions</b>	38	22	1.6
Primary and Vocational Teaching Professions	32	18	1.7
Health and Social Work Professionals	20	10	1.2
Corporate Professionals	55	34	1.7
Technicians	35	20	1.6
Supervisors	18	9	1.6
<b>All Employees</b>	21	10	1.9
Service and Healthcare Assistants	3	2	1.5
Private Security Officers	4	1	2.2
Administrative Employees	56	26	1.9
Retail Employees	5	3	2.0
Personal Services Staff	1	0	n/a
<b>Manual Workers</b>	1	0	n/a

*Reading: Between Q3 2022 and Q2 2024, 69% of engineers engaged in telework at least once per month. n/a: not applicable*

*Scope: Salaried workers of enterprises working in France, excluding Mayotte.*

*Source: Authors' calculations using Insee, French Labour Force Survey.*

Sectoral differences also partly reflect workforce composition. Indeed, telework has become a predominant practice among managers and professionals, with nearly two-thirds engaging in it, whereas it remains almost non-existent for manual workers. Some professions are, however, less suited to telework. For example, in liberal professions (lawyers, veterinarians, ...), only one in five teleworks. The proportion does not exceed 30% for professors and senior scientific professionals in the private sector. Compared to managers, other occupational categories hold fewer teleworkable positions. For instance, 20% of employee positions are teleworkable, versus

80% of executive roles. Furthermore, when telework is deemed possible, it is less frequently practised among employees: fewer than 50% telework compared to nearly 80% of managers and professionals. Among all employees holding teleworkable positions, 13% are unable to telework due to employer restrictions, compared to less than 3% for managers and professionals, suggesting weaker bargaining power or lower employer trust in the former group.

## 2.5 More Telework Agreements Anchoring Hybrid Work

In the original database we constructed on collective agreements in the Acemo-Covid sample, more than two-thirds of the agreements indicate a context that promotes regular telework at a rate of at least one day per week<sup>8</sup>. Among these two-thirds, half offer two days of telework per week, while one-third allow a maximum of one day per week (Favaro and Thiounn, 2025).

Agreements are negotiated either for indefinite durations, until termination or renegotiation, or for fixed terms. Less than half of these agreements are established for an indefinite duration. Three-quarters of fixed-term agreements are valid for more than one year.

As of December 31, 2017, nearly fifty establishments had a valid telework agreement (3). Among them, more than half primarily offered one telework day per week. One year later, more than 300 agreements were in effect, with nearly two-thirds allowing one telework day per week. This proportion stabilized the following year, with a total of nearly a thousand agreements in force.

By December 31, 2020, more establishments were offering two telework days per week, with this number doubling over the year. Without accounting for specific rules implemented during the health crisis, half of the establishments allowed their employees to telework one day per week, two-fifths authorized two regular telework days per week, and one-tenth of the establishments allowed more than three days.

One year later, on December 31, 2021, the option to telework two days per week had become the norm. Only one third of establishments still limited telework to a maximum of one day.

This trend continued as of December 31, 2022, and December 31, 2023. The proportion of agreements offering two days of telework increased by 2 percentage points, while the share of agreements allowing only one day declined by the same amount, representing just over a thousand of the 4,000 establishments with an active telework agreement.

Thus, hybrid telework-averaging two days per week-has emerge as the dominant arrangement in agreements, aligning with prior observations of employee practices, which also suggest an average of around two days per week.

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<sup>8</sup>The remaining agreements either do not specify the number of authorized or maximum telework days or limit this number to fewer than 40 days per year.

Table 3: Distribution of the Maximum Authorized Weekly Telework Days as of December 31 of Each Year from 2017 to 2023

Nb. days	2017		2018		2019		2020		2021		2022		2023	
	Total	Share	Total	Share	Total	Share	Total	Share	Total	Share	Total	Share	Total	Share
<b>1</b>	27	57.45	192	57.83	530	63.09	824	47.38	1002	30.37	1152	27.69	1146	27.59
<b>2</b>	18	38.30	125	37.65	275	32.74	702	40.37	1713	51.93	2267	54.50	2238	53.87
<b>3</b>	2	4.26	11	3.31	22	2.62	139	7.99	413	12.52	541	13.00	555	13.36
<b>4</b>	0	0.00	3	0.91	8	0.95	29	1.67	72	2.27	83	2.00	83	2.00
<b>5</b>	0	0.00	1	0.30	5	0.60	45	2.59	95	2.91	117	2.81	132	3.18
<b>Total</b>	47	100.00	332	100.00	840	100.00	1739	100.00	3299	100.00	4160	100.00	4154	100.00

*Scope: Establishments surveyed by Acemo-Covid with at least one publicly available firm telework agreement. Bilateral agreement or amendment.*

*Reading: Maximum number of telework days per week according to the latest signed agreement, valid as of 12/31 of the year. For example, as of 12/31/2017, 27 establishments in the sample allowed a maximum of one telework day, while 18 establishments permitted up to two days. Source:*

*Authors' calculations based on publicly available firm telework agreement on Légifrance.*

### 3 A Statistical Modelling of Individual Telework Practices

As highlighted in the introduction, the literature indicates that beyond the industry, profession, and socio-professional category (PCS), other individual, household, job, or enterprise characteristics can influence telework practices. For instance, the flexibility offered by telework may attract young parents, as well as employees residing far from their workplace. Conversely, a small home might be a barrier. Companies may prefer that newly hired or short-term contract employees be physically present in the workplace to facilitate their integration into teams and allow for direct supervision. The same may apply to managers responsible for overseeing on-site employees.

In this section, we will not test these particular relationships but they suggest the need to analyse the statistical link between these firm and worker characteristics and telework use within a unified model. This section will thus sequentially present the model, the construction of variables—including additional data used for this analysis—, the main results, and finally, sensitivity tests.

#### 3.1 Five Blocks of Characteristics from the Company to the Employee's Housing

This modelling aims to describe the observable characteristics of private-sector employees who engage in telework, covering attributes related to their employer, job, housing, household, and individual factors. To achieve this, we estimate a probit model. For readability, we divide the equation into five thematic blocks of variables.

##### Individual/Household

$$\begin{aligned} \text{Probit } (P(\text{Telework} = 1)) = & \beta_0 + \beta_1 \cdot \text{Gender} + \beta_2 \cdot \text{Age group} + \beta_3 \cdot \text{Child under 6 years old} \\ & + \beta_4 \cdot \text{Child between 6 and 17 years old} + \beta_5 \cdot \text{Partner teleworking} \end{aligned}$$

##### Job

$$\begin{aligned} & + \beta_6 \cdot \text{Occupation} + \beta_7 \cdot \text{Salary range} \\ & + \beta_8 \cdot \text{Job tenure} + \beta_9 \cdot \text{Supervisory role} \end{aligned}$$

##### Housing

$$+ \beta_{10} \cdot \text{Living space per person}$$

$+\beta_{11} \cdot \text{Urban area size and municipality category} + \beta_{12} \cdot \text{Home-to-work distance}$

### Company

$+\beta_{13} \cdot \text{Max. number of days mentioned in the agreement}$

$+\beta_{14} \cdot \text{Proportion of managers and professionals in the enterprise}$

$+\beta_{15} \cdot \text{Company category} + \beta_{16} \cdot \text{Geographical origin of the parent company}$

Additional control variables are also included to mitigate potential omitted variable biases. These variables are presented below:

Nationality + Survey quarter

+Enterprise's sector + Company age

+Contract type + Part-time employment +  $\epsilon$

## 3.2 Sources and Variable Construction

*Variables directly derived from the French LFS database:*

**Telework,** gender, contract type, job tenure, supervisory role, salary range, nationality, part-time status, and survey quarter.

**Age group** in five-year brackets is constructed from the "AGE" variable.

**Having a child under 6 years old or between 6 and 17 years old** is constructed using the variables "NBENFIND\_LOG\_A," "NBENFIND\_LOG\_B," and "NBENFIND\_LOG\_C".

**Partner telework status** is determined by linking the respondent to their partner (by matching different respondents from the same household) and retrieving the associated telework variable.

**Urban area size and municipality category** are derived from a combination of two variables present in the French LFS ("TAAV2020" and "CATEAAV2020", according to the 2020 zoning).

*Variables derived from complementary sources:*

**Living space per person** is calculated using comprehensive Insee data on French housing from the Fideli database, which serves as the sampling frame for surveyed households in the French LFS.

**Home-to-work distance** is calculated using the LFS respondent’s municipality of residence and the location of their workplace. Insee provides a tool (AT27-PSAR Territorial Analysis) that estimates average road distances between municipalities (taking into account the location of both residences and workplaces within municipal boundaries). One-third of observations in our sample lack a home-to-work distance after this processing. For half of these cases, the employer’s SIRET establishment identifier is missing. For the other half, we calculate the straight-line (geodesic) distance between home and work. We impute the home-to-work distance using a multiplicative coefficient derived from a regression of straight-line distance on road distance for non-missing observations, accounting for the fact that road distance is almost always greater.

**The number of telework days mentioned in the agreement** covering the employee’s establishment is obtained through the text analysis described earlier. By construction, this variable is not available for employees whose employer is outside the Acemo-Covid sample.

**The proportion of executives and professionals in the enterprise** is sourced from the 2022 “Base Tous Salariés” (BTS) which records all salaried job positions in companies.

**Firm-level variables such as sector, category, geographical origin of the group, or age** are taken from Insee’s 2022 Fare files, which cover the universe of non-financial, non-agricultural companies. When a corresponding Siren identifier is not found in the Fare files (mainly in the finance and agriculture sectors), the exhaustive firm directory Sirius is used. These variables are presented at the level of companies profiled by Insee.

The Fare, BTS and LFS databases are accessible to researchers via the CASD (Secure Data Access Centre).

### 3.3 Main Results

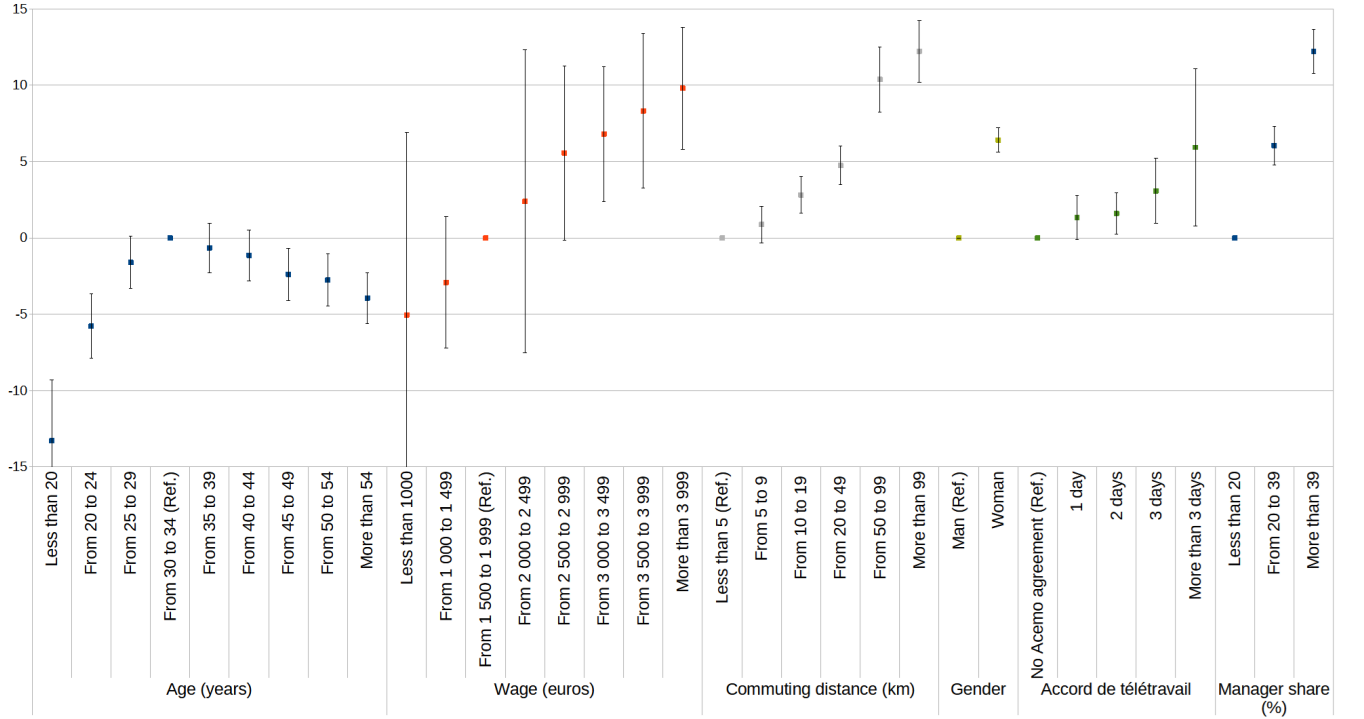
The baseline probit regression correlates the binary variable of interest—whether or not the individual has teleworked in the past four weeks—with the five blocks of variables simultaneously. The selected sample includes all employees in private French companies, associations, or public enterprises (EDF, La Poste, SNCF...) in their first survey wave, between the third quarter of 2022 and the second quarter of 2024. Thus, self-employed farmers, artisans, merchants, and business owners are excluded. In addition, at this stage, we keep only workers for which we know the SIRET number of their employer: thus, we can observe employer characteristics and

the commuting distance. The estimation is weighted using the French LFS weights constructed by Insee to ensure representativeness of the first-wave sample (the unweighted estimates yield very similar results).

The full odds ratios and their robust standard errors are shown in column (5) of Table B in the appendix B. We discuss hereafter the findings in terms of "average marginal effects". The Figure 3 illustrates selected results.

The aggregated employee's occupational category (PCS) is the variable that contributes the most to disparities in telework adoption. The gradients previously described for these dimensions are confirmed in the probit model. However, many other dimensions are also correlated with telework.

Figure 3: Telework, Average Marginal *Effects* for Selected Characteristics. In %



Sample: LFS Q2-2022-Q4-2024, employees of private or public enterprises residing and working in France, excluding Mayotte, with known SIRET.

Source: Authors' estimations.

Workers in an enterprise that has signed a **collective agreement** allowing one day of telework per week have a telework probability that is 1.3 percentage points higher than employees in companies without a telework agreement in the Acemo sample. This difference increases to 1.6 percentage points when the agreement allows two days and exceeds 3 percentage points when it allows three or more days.<sup>9</sup>

<sup>9</sup>Recall that the Acemo sample includes the majority of private firms and workers affected by telework agreements. When we split the "no-Acemo agreement" group into two subcategories —workers not covered by any firm agreement and workers covered by another telework agreement— the estimated coefficients (not

**Men, newcomers, and supervisors engage in telework less frequently.** Women are significantly more likely to telework than men, with a 6.4 percentage point higher probability. This result is not related to the fact that more women are on part-time jobs (the coefficient of part-time/full time control variable is non significant and small). This gender gradient is no more driven by the presence of young children. In fact, parents —both men and women— of children under six years old are no more likely to telework than other employees<sup>10</sup>. However, parents of older children, aged 6 to 17, have a telework probability that is 2.2 percentage points higher.

The higher telework rate among women, or conversely the lower rate among men, suggests other potential mechanisms: for example, women, who are more exposed to workplace harassment in France (Algava, 2016), might find telework more comfortable; as women traditionally make more non-professional journeys (to schools, shops, etc.)<sup>11</sup>, they might appreciate reducing their weekly commuting time by teleworking, whereas men might prefer going to the office to avoid household chores. Recall that some studies suggest greater difficulties for women compared to men in telework or working from home arrangements during the pandemic but similar levels of well-being (Yang et al. (2023), Senik et al. (2024), Castro-Trancón et al. (2024)), as well as the persistent unequal distribution of domestic tasks within households (Landour, 2024). Finally, for a given occupation, women may actually have a more teleworkable job (see below).

Having a partner who teleworks is also associated with a higher likelihood of teleworking. This finding aligns with recent studies from the United States suggesting a strong positive relationship between partners' telework decisions Pabilonia and Vernon (2024). The data do not clarify whether this correlation reflects coordinated schedules (teleworking simultaneously or alternating shifts) or a "capital effect" (households investing in telework-friendly setups such as dedicated office spaces and equipment).

New hires and workers with long tenure telework less frequently than those with intermediate seniority. This trend reflects not only the fact that newcomers hold fewer telework-compatible jobs but also that a higher proportion of them report that their employers do not want them to telework—likely to facilitate supervision and integration into workplace teams. Finally, employees—whether executives or non-executives—without managerial responsibilities have a 2.9 percentage point higher probability of teleworking compared to those with supervisory roles. Supervisors may need to be physically present at the office, especially if their subordinates are regularly on-site.

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reported) for the number of telework days change only marginally. However, the dummy variable for a non-Acemo telework agreement is significantly and positively correlated with telework practice.

<sup>10</sup>Adding the interacted term gender\*child under 6 in the regressions gives non-significant coefficients for both men and women (not reported).

<sup>11</sup>See e.g. Le Jeannic and Razafindranovona (2009). Note that in France, the daily professional commuting time of women is slightly lower: our regressions include the physical distance between the workers' residence and her workplace.



### **A small or close-to-work residence is associated with lower telework adoption.**

Living in a larger home appears to facilitate telework: having more than 30 square meters per person increases the probability of teleworking by 3.7 percentage points compared to those with less than 20 square meters per person. This result holds even after controlling for commuting distance, as home size and commuting distance are partially linked through a trade-off between housing comfort and transport time. This finding aligns with research showing that some teleworkers highly value a well-equipped home office (Schulz et al., 2023).

Telework adoption is also correlated with commuting distance. Holding other factors constant, living more than 100 km from one’s workplace increases the probability of teleworking by 12.2 percentage points compared to those living within 5 km. For intermediate distances, the probability of telework increases progressively. Several studies suggest that this relationship partially reflects reverse causality (e.g., Asmussen et al. (2024), Belloc et al. (2024), Coskun et al. (2024)): the ability to telework at least a few days per week enables workers to live farther from their workplace while maintaining a similar or reduced weekly commuting time. However, if relocation due to telework were the dominant effect, we would expect a sharper increase in telework adoption by commuting distance. Yet, the French LFS survey data do not—at least not yet—show a statistically significant strengthening of this trend between mid-2022 and mid-2024.

## **3.4 Sensitivity Analysis and Additional Results**

This section presents several variations with different specifications and sample selections to test the robustness and heterogeneity of the previous relationships.

**Block-by-block estimates.** The table in Appendix B displays the estimated coefficients as variable blocks are added one by one (columns 1 to 4). The last column (5) is, as a reminder, our baseline estimation, including all variable blocks. The pseudo-R<sup>2</sup> jumps when the second block is included; this jump is mostly driven by the aggregated occupations.

For most variables, the signs of the estimated coefficients remain consistent across columns. There are two exceptions related to gender and family composition. First, having a child under 6 years old initially appears to be negatively correlated with telework adoption, but this relationship is no longer significant when controlling for job characteristics, particularly occupational category (PCS). Similarly, in the first column, having a child aged 6 to 17 does not seem correlated with telework. However, the relationship becomes positive and significant when more control variables are added, although the estimated coefficient remains small. These changes result from the correlation between occupation and the presence of children; in particular female executive and professionals are less likely to have children than female employees.<sup>12</sup>

Additionally, the coefficient associated with being a woman increases when adding other

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<sup>12</sup>Consistently, the fertility gradient according to occupations is also significant in France (Daguet, 2019).

variables, particularly salary.

Moreover, moving from regression (4) to regression (5) confirms the importance of controlling for company age and sector. While the probability of teleworking appears significantly different between workers in micro-enterprises/SMEs and those in medium-sized/large enterprises, the geographical origin of the corporate headquarters seems to have a stronger discriminating effect.

The table in Appendix C provides additional variations of our model to test the robustness of our results.

**Expanded sample and detailed PCS.** Column 2 includes salaried workers for whom no SIRET number is available; the corresponding establishment or firm-level variables including commuting distance then take a specific "undetermined" category (not reported). The third column introduces a three-digit PCS to test whether this level of detail affects some correlations<sup>13</sup>. Many studies on telework use a "task content" approach, which statistically assigns telework feasibility to a given profession.

Overall, the estimated coefficients have the same sign, similar magnitude, and the same significance level regardless of the regression specification. In particular, introducing the three-digit PCS occupations does not significantly impact the coefficients of other variables, suggesting a high degree of heterogeneity within professions. This finding questions approaches that infer workers' telework based solely on occupational classification, even at a detailed level.

**Restricted samples: non-executives, teleworkable jobs, and women.** To further explore potential heterogeneity in the estimates, column 4 of the table in Appendix C includes only non-executive employees, while column 5 includes only workers who report that their job is teleworkable. Finally, the last column focuses exclusively on women. The findings remain similar for non-managers/professionals, except for tenure, which is no longer significant.

Notably, the variable for the proportion of managers and professionals in the enterprise remains significant, which is consistent with a telework spillover effect. More precisely, holding other characteristics constant, a non-executive employee's probability of teleworking is 12.2 percentage points higher in an enterprise where more than 40% of employees are managers or professionals compared to an enterprise where fewer than 20% are managers and professionals. This suggests a diffusion effect of telework within firms.

For teleworkable jobs, most coefficients remain similar, except for the gender variable: the coefficient is almost halved when applying our model only to jobs that respondents consider teleworkable. This suggests that women's higher telework adoption may be partly explained by the characteristics of their job, particularly its telework feasibility. However, there is no

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<sup>13</sup>A probit model loses robustness when adding a large number of dummy variables. In such cases, a linear model may be preferable. A linear model applied to our variables yields results consistent with the probit model.

marked gender difference and the coefficients associated with children are similar for men and women.

**Employer fixed effects.** The sample size of the French Labour Force Survey (French LFS) allows for approximately 40% of observations to include at least one other employee from the same legal unit (SIREN), interviewed over eight quarters from mid-2022 to mid-2024. These 12,199 workers belong to 3,356 different legal units. The table in Appendix D provides an estimation of our full model with employer fixed effects. Since the probit model is unsuitable for such a large number of fixed effects, the estimation is performed using OLS. The coefficients can therefore be interpreted as "equivalents" of average marginal effects from the probit estimations discussed earlier.

The fixed effects mechanically absorb all firm-level variables. Women remain associated with a greater likelihood of practising telework, as do having a partner who also teleworks, a minimum tenure of one year, the size of the home, and its distance from the workplace. However, the coefficient for the presence of a child aged 6 to 17 is no longer significant.

Overall, for variables specific to individual workers, most coefficients are of similar magnitude and significance as those obtained for the full sample without fixed effects. These results suggest that even within the same company, individual factors continue to play a significant role in determining whether or not telework is practised.

## 4 Conclusion

Drawing on a wide range of data sources—surveys and administrative files—this document illustrates hybrid teleworking has become firmly embedded in the French business sector. Between one-fifth and one-quarter of workers, the majority of whom are managers, telework, while full remote arrangements remain rare. Our textual analysis reveals that a significant number of firm agreements have institutionalized a hybrid work model, typically consisting of an average of two telework days per week.

Nevertheless, telework remains a heterogeneous practice, varying across firms, within firms, and between occupations. Even when incorporated into the same model, numerous individual characteristics are correlated with telework. Most of these correlations hold up under sensitivity analyses, including alternative sample selections, detailed occupational controls, and firm-fixed estimations. Variations in telework adoption by gender, household composition, housing conditions, and tenure suggest potential avenues for further research. Additionally, there is notable heterogeneity between companies, calling for an exploration of its causes and its implications for productivity.

## References

- Aksoy, C. G., Barrero, J. M., Bloom, N., Davis, S. J., Dolls, M., and Zarate, P. (2023). Working from home around the globe: 2023 report.
- Algava, E. (2016). Dans quels contextes les comportements sexistes au travail sont-ils le plus fréquents ? *Dares Analyses*, (46).
- Asmussen, K. E., Mondal, A., and Bhat, C. R. (2024). The interplay between teleworking choice and commute distance. *Transportation Research Part C: Emerging Technologies*, 165:104690.
- Barrero, J. M., Bloom, N., and Davis, S. J. (2023). The evolution of work from home. *Journal of Economic Perspectives*, 37(4):23–50.
- Beatriz, M., Bèque, M., Coutrot, T., Erb, L., Inan, C., Duval, M., Mauroux, A., and Rosankis, E. (2022). Télétravail durant la crise sanitaire-quelles pratiques en janvier 2021 ? quels impacts sur le travail et la santé ? *Dares Analyses*, (9).
- Beatriz, M. and Erb, L. (2024a). Comment évolue la pratique du télétravail depuis la crise sanitaire ? *Dares Analyses*, (64).
- Beatriz, M. and Erb, L. (2024b). Le télétravail améliore-t-il les conditions de travail et de vie des salariés ? *Dares Analyses*, (65).
- Belloc, I., Gimenez-Nadal, J. I., and Molina, J. A. (2024). Teleworking and travel purposes: Uk evidence after the covid-19 pandemic. IZA Discussion Paper 17413, IZA - Institute of Labor Economics.
- Bergeaud, A., Cette, G., and Drapala, S. (2023). Telework and productivity before, during and after the covid-19 crisis. *Economics and Statistics*, (539):73–89.
- Bergeaud, A., Cette, G., and Drapala, S. (2024). Telework and productivity: insights from an original survey. *Applied Economics Letters*, 31(19):2026–2029.
- Bloom, N., Han, R., and Liang, J. (2024). Hybrid working from home improves retention without damaging performance. *Nature*, 630:920–925.
- Castro-Trancón, N., Zuazua-Vega, M., Osca, A., Cifre, E., and García-Izquierdo, A. L. (2024). Effects of teleworking on wellbeing from a gender perspective: a systematic review. *Frontiers in Organizational Psychology*, 2.
- Coskun, S., Dauth, W., Gartner, H., Stops, M., and Weber, E. (2024). Working from home increases work-home distances. IZA Discussion Paper 16855, IZA - Institute of Labor Economics.

- Daguet, F. (2019). En 2016, les femmes cadres ont un peu moins d'enfants que les employées. *Insee Première*, (1769).
- Eurofound and ILO (2017). Working anytime, anywhere : the effects on the world of work. *Publications Office of the European Union*.
- Favaro, A. and Thiounn, C. (2025). Les accords d'entreprise sur le télétravail : quels changements à la suite de la crise sanitaire ? *Dares Focus*, (15).
- Gueguen, G. and Senik, C. (2023). Adopting telework: The causal impact of working from home on subjective well-being. *British Journal of Industrial Relations*, 61(4):832–868.
- Jauneau, Y. (2022). En 2021, en moyenne chaque semaine, un salarié sur cinq a télétravaillé. *Insee Focus*, (263).
- Landour, J. (2024). Le télétravail et les organisations domestiques depuis la covid-19 en france, en suède et en suisse. *Sociologie du travail*, 66(1).
- Le Jeannic, T. and Razafindranovona, T. (2009). Près d'une heure quotidienne de transport : les disparités se réduisent mais demeurent. In *France, portrait social – Édition 2009*. INSEE.
- Maheshwari, R., Van Acker, V., and Gerber, P. (2024). Commuting vs teleworking: How does it impact the relationship between commuting satisfaction and subjective well-being. *Transportation Research Part A: Policy and Practice*, 182:104041.
- Mofakhami, M., Counil, E., and Pailhé, A. (2024). Telework, working conditions, health and wellbeing during the covid crisis: A gendered analysis. *Social Science & Medicine*, 350:116919.
- OECD (2021). Measuring telework in the covid-19 pandemic. *OECD Digital Economy Papers*, (314).
- Pabilonia, S. W. and Vernon, V. (2024). Couples' remote work arrangements and labor supply. IZA Discussion Paper 17588, IZA - Institute of Labor Economics.
- Perelman, J., Serranheira, F., and Group, T. (2024). Teleworking: does it make workers healthier and productive? a cross-sectional study on a southern european population. *BMC Public Health*, 24:1946.
- Pesenti, M. (2022). Les accords d'entreprise portant sur le télétravail : quels usages durant la crise sanitaire ? *Dares Analyses*, 57.
- Schulz, R., Watson, V., and Wersing, M. (2023). Teleworking and housing demand. *Regional Science and Urban Economics*, 101:103915.

- Senik, C., Clark, A. E., D'Ambrosio, C., Lepinteur, A., and Schröder, C. (2024). Teleworking and life satisfaction during covid-19: The importance of family structure. *Journal of Population Economics*, 37(1).
- Sepanta, F., Sirati, M., and O'Brien, W. (2024). Sustainability of telework: Systematic quantification of the impact of teleworking on the energy use and emissions of offices and homes. *Journal of Building Engineering*, 91:109438.
- Yang, D., Kelly, E. L., Kubzansky, L. D., and Berkman, L. (2023). Working from home and worker well-being: New evidence from Germany. *ILR Review*, 76(3):504–531.
- Émilie Pénicaud (2024). Une photographie du marché du travail en 2023 : L'emploi augmente modérément, le chômage se stabilise après sept années de baisse. *Insee Première*, (1987).

# Appendices

## A Comparison of Tracov 2 and French LFS Surveys

It is useful to compare Tracov, conducted among individuals, with the French LFS, which is also based on an individual/household questionnaire. For private-sector workers, the Continuous Employment Survey (French LFS) reports that 23% were teleworking in 2023. Beatriz and Erb (2024a), using Tracov 2, obtain a slightly higher proportion of 26% in 2023.

However, these two statistics cover different populations. The Tracov 2 dataset includes all salaried employees residing in mainland France, aged 20 to 62, randomly selected from demographic records on housing and individuals. In contrast, the French LFS dataset used in our analysis covers salaried workers from both private and public enterprises across all of France, excluding cross-border workers, and includes individuals aged 15 and older. The share of teleworkers is lower in the public sector, in overseas territories, and among those over 62 years old. It is also nearly non-existent among individuals under 20 but higher among cross-border workers. Additionally, the data collection period for Tracov 2 primarily covers the first quarter of 2023, whereas the French LFS shows a slight seasonal effect, with teleworking prevalence being higher in this quarter. Restricting the French LFS observations to the first quarter of 2023, focusing on individuals aged 20 to 62 while excluding overseas territories, increases the teleworking rate by more than one percentage point. Conversely, extending the scope to include all employees lowers it by about two percentage points.

Overall, when adjusted to a comparable scope, the difference between French LFS and Tracov 2 widens, with the latter survey capturing approximately four percentage points more teleworkers.

This discrepancy likely stems from Tracov’s greater ability to capture very occasional or irregular telework. Indeed, the French LFS follows Eurostat’s recommendations for European Labour Force Surveys in structuring its telework-related questions. It first asks whether the respondent has teleworked in the four weeks preceding the survey, followed by a question on the average number of telework days per week. In contrast, Tracov 2 does not specify a reference period and instead asks: “Do you currently practice teleworking?” with the first response option being “1. Never.” Thus, an employee surveyed on April 5 who only teleworks during even-numbered months would answer “yes” in Tracov 2 but “no” in the French LFS.

For the most intensive teleworkers, differences in question wording appear to have little impact. In early 2023, according to Dares data, 5% of workers teleworked at least three days per week according to both surveys, and 8% teleworked two days per week, again with identical estimates from both surveys. Thus, both surveys provide a similar picture of intensive teleworking practices. However, the French LFS finds that only about 9% of salaried workers teleworked one day per week or less in the four preceding weeks, whereas Tracov 2 reports 13% for the same category. Since Tracov captures a significantly higher number of occasional teleworkers, direct comparisons between the two surveys on other dimensions, such as teleworking preferences among teleworkers, are not straightforward.

## B Estimates for Salaried Workers (employer's Siret available). LFS Q2-2022-Q2-2024

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		<i>Dependent variable : Telework</i>				
		(1)	(2)	(3)	(4)	(5)
Constant		0.11*** (0.04)	-1.04*** (0.06)	-1.16*** (0.08)	-1.39*** (0.08)	-1.52*** (0.09)
Gender :	Male	-	-	-	-	-
	Female	0.15*** (0.02)	0.31*** (0.02)	0.33*** (0.02)	0.37*** (0.02)	0.38*** (0.03)
Age group :	30-35 years	-	-	-	-	-
	Under 20 years	-1.67*** (0.13)	-0.74*** (0.14)	-0.61*** (0.15)	-0.66*** (0.15)	-0.88*** (0.16)
	20-25 years	-0.65*** (0.05)	-0.19*** (0.05)	-0.16*** (0.06)	-0.19*** (0.06)	-0.34*** (0.06)
	25-30 years	-0.13*** (0.04)	-0.05 (0.04)	-0.05 (0.05)	-0.07 (0.05)	-0.09* (0.05)
	35-40 years	-0.05 (0.04)	-0.06 (0.04)	-0.08* (0.04)	-0.05 (0.04)	-0.04 (0.05)
	40-45 years	-0.05 (0.04)	-0.10** (0.04)	-0.10** (0.05)	-0.07 (0.05)	-0.06 (0.05)
	45-50 years	-0.12*** (0.04)	-0.21*** (0.05)	-0.21*** (0.05)	-0.16*** (0.05)	-0.13*** (0.05)
	Over 55 years	-0.30*** (0.04)	-0.30*** (0.04)	-0.33*** (0.05)	-0.26*** (0.05)	-0.23*** (0.05)
Has a child under 6 years old :		-0.10*** (0.03)	-0.03 (0.03)	0.02 (0.03)	0.03 (0.03)	0.02 (0.04)
Has a child between 6 et 17 years old :		-0.01 (0.02)	0.06** (0.03)	0.13*** (0.03)	0.13*** (0.03)	0.13*** (0.03)
Partner's telework:	Yes	-	-	-	-	-
	No	-0.89*** (0.03)	-0.38*** (0.03)	-0.30*** (0.03)	-0.26*** (0.04)	-0.23*** (0.04)
	Partner not employed	-0.77*** (0.03)	-0.31*** (0.04)	-0.24*** (0.04)	-0.21*** (0.04)	-0.17*** (0.04)
	No partner	-0.78*** (0.03)	-0.26*** (0.04)	-0.26*** (0.04)	-0.23*** (0.04)	-0.22*** (0.04)
Observations		30,953	30,953	30,953	30,953	30,953

*Note:*

(1) Individual variables,  
(3) Housing variables

(2) Job variables,  
(4) Enterprise variables, (5) Control variables

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01



		<i>Dependent variable : Telework</i>				
		(1)	(2)	(3)	(4)	(5)
Occupation:	Intermediate professions	-	-	-	-	-
	Managers and professionals		0.84*** (0.03)	0.77*** (0.03)	0.59*** (0.03)	0.54*** (0.03)
	Employees		-0.42*** (0.03)	-0.37*** (0.03)	-0.33*** (0.03)	-0.32*** (0.04)
	Blue collars		-1.82*** (0.07)	-1.79*** (0.07)	-1.73*** (0.07)	-1.66*** (0.08)
Net monthly salary	1500 to 2000 €	-	-	-	-	-
	0 to 1000€		-0.44*** (0.06)	-0.44*** (0.06)	-0.33*** (0.06)	-0.31*** (0.07)
	1000 to 1500€		-0.23*** (0.04)	-0.21*** (0.04)	-0.16*** (0.04)	-0.17*** (0.04)
	2000 to 2500€		0.24*** (0.03)	0.19*** (0.03)	0.14*** (0.03)	0.15*** (0.04)
	2500 to 3000€		0.44*** (0.04)	0.37*** (0.04)	0.29*** (0.04)	0.29*** (0.04)
	3000 to 3500€		0.60*** (0.05)	0.48*** (0.05)	0.35*** (0.05)	0.36*** (0.05)
	3500 to 4000€		0.68*** (0.06)	0.55*** (0.06)	0.41*** (0.06)	0.43*** (0.06)
	More than 4000€		0.85*** (0.05)	0.67*** (0.05)	0.49*** (0.05)	0.50*** (0.06)
Job tenure :	Less than one year	-	-	-	-	-
	From 1 to less than 5 years		0.14*** (0.03)	0.17*** (0.03)	0.18*** (0.04)	0.14*** (0.04)
	From 5 to less than 10 years		0.13*** (0.04)	0.18*** (0.04)	0.17*** (0.04)	0.10** (0.04)
	10 years or more		0.09** (0.04)	0.16*** (0.04)	0.09** (0.04)	0.02 (0.04)
Supervisory task :	Yes, it is the main task	-	-	-	-	-
	Yes, but it is not the main task		0.29*** (0.03)	0.26*** (0.03)	0.17*** (0.03)	0.15*** (0.03)
	No		0.40*** (0.03)	0.35*** (0.03)	0.20*** (0.03)	0.17*** (0.03)
Living space per person :	Less than 20 m <sup>2</sup>			-	-	-
	Between 20 and 30 m <sup>2</sup>			0.17*** (0.04)	0.14*** (0.04)	0.13*** (0.04)
	More than 30 m <sup>2</sup>			0.28*** (0.04)	0.25*** (0.04)	0.22*** (0.04)
Observations		30,953	30,953	30,953	30,953	30,953

*Note:*

(1) Individual variables,  
(3) Housing variables

(2) Job variables,  
(4) Enterprise variables, (5) Control variables

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

		<i>Dependent variable : Telework</i>				
		(1)	(2)	(3)	(4)	(5)
Size of the attraction area (AAV) and municipality category	Paris hub			-	-	-
	Hub of an AAV with to 200k to 700k inhabitants			-0.37*** (0.04)	-0.23*** (0.04)	-0.22*** (0.05)
	Suburb of an AAV with 200k to 700k inhabitants			-0.48*** (0.04)	-0.32*** (0.04)	-0.31*** (0.04)
	Hub of an AAV with 50k to 200k inhabitants			-0.57*** (0.06)	-0.43*** (0.06)	-0.41*** (0.06)
	Suburb of an AAV with 50k to 200k inhabitants			-0.72*** (0.05)	-0.53*** (0.05)	-0.51*** (0.05)
	Hub of an AAV with more than 700k (excluding Paris)			-0.10** (0.04)	-0.06 (0.04)	-0.06 (0.04)
	Suburb of an AAV with more than 700k (excluding Paris)			-0.35*** (0.04)	-0.25*** (0.04)	-0.24*** (0.04)
	Municipality outside the attraction of cities			-0.78*** (0.06)	-0.58*** (0.06)	-0.54*** (0.07)
	Hub of an AAV with less than 50k inhabitants			-0.64*** (0.06)	-0.47*** (0.07)	-0.44*** (0.07)
	Suburb of an AAV with less than 50k inhabitants			-0.70*** (0.06)	-0.53*** (0.06)	-0.50*** (0.06)
	Paris suburb			-0.43*** (0.06)	-0.34*** (0.06)	-0.30*** (0.06)
Home-to-work distance	Less than 5 km			-	-	-
	Between 5 to 10 km			0.08** (0.04)	0.06* (0.04)	0.05 (0.04)
	Between 10 to 20 km			0.19*** (0.03)	0.18*** (0.04)	0.17*** (0.04)
	Between 20 to 50 km			0.32*** (0.04)	0.29*** (0.04)	0.28*** (0.04)
	Between 50 to 100 km			0.65*** (0.06)	0.60*** (0.06)	0.57*** (0.06)
	More than 100 km			0.78*** (0.05)	0.69*** (0.05)	0.67*** (0.05)
Number of telework days in the agreement	No agreement				-	-
	1 day				0.14*** (0.04)	0.08* (0.04)
	2 days				0.10*** (0.04)	0.09** (0.04)
	3 days				0.26*** (0.06)	0.17*** (0.06)
	4 days or more				0.42*** (0.14)	0.33** (0.14)
Observations		30,953	30,953	30,953	30,953	30,953

Note:

(1) Individual variables,  
(3) Housing variables

(2) Job variables,  
(4) Enterprise variables, (5) Control variables

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

		<i>Dependent variable : Telework</i>				
		(1)	(2)	(3)	(4)	(5)
Proportion of managers and professionals in the enterprise	Less than 20%				-	-
	More than 40%				0.83*** (0.03)	0.62*** (0.03)
	Between 20 to 40%				0.41*** (0.03)	0.33*** (0.03)
Enterprise category						
	Intermediate-sized enterprises				-	-
	Micro-enterprises				-0.02 (0.04)	-0.10** (0.05)
	SMEs				-0.10*** (0.03)	-0.10*** (0.04)
	Large enterprises				0.01 (0.03)	-0.03 (0.03)
Group origin	French-only enterprises				-	-
	Foreign multinationals				0.06* (0.04)	0.21*** (0.04)
	French multinationals				0.05 (0.03)	0.14*** (0.04)
Controls						✓
Pseudo- $R^2$		0.068	0.351	0.377	0.412	0.432
Observations		30,953	30,953	30,953	30,953	30,953

*Note:*

(1) Individual variables,  
(3) Housing variables

(2) Job variables,  
(4) Enterprise variables, (5) Control variables

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## C Sensibility to the Sample and the Detail of the Occupational Classification (PCS)

		<i>Dependent variable : Telework</i>					
		(1)	(2)	(3)	(4)	(5)	(6)
Constant		−1.52*** (0.09)	−1.52*** (0.09)	−1.23*** (0.37)	−1.50*** (0.12)	−0.41*** (0.13)	−1.11*** (0.12)
Gender	Male	-	-	-	-	-	-
	Female	0.38*** (0.03)	0.37*** (0.02)	0.31*** (0.03)	0.48*** (0.03)	0.22*** (0.03)	
Age group	30-35 years	-	-	-	-	-	-
	Under 20 years	−0.88*** (0.16)	−0.80*** (0.14)	−0.87*** (0.19)	−0.95*** (0.16)	−0.39* (0.22)	−0.52*** (0.17)
	20-25 years	−0.34*** (0.06)	−0.37*** (0.06)	−0.31*** (0.07)	−0.39*** (0.08)	−0.21** (0.09)	−0.42*** (0.08)
	25-30 years	−0.09* (0.05)	−0.08* (0.05)	−0.10* (0.05)	−0.08 (0.06)	−0.03 (0.06)	−0.14** (0.07)
	35-40 years	−0.04 (0.05)	−0.04 (0.04)	−0.06 (0.05)	−0.04 (0.06)	0.01 (0.06)	−0.03 (0.06)
	40-45 years	−0.06 (0.05)	−0.07 (0.04)	−0.11** (0.05)	0.01 (0.06)	−0.06 (0.06)	−0.01 (0.06)
	45-50 years	−0.13*** (0.05)	−0.13*** (0.05)	−0.14*** (0.05)	−0.14** (0.06)	−0.12* (0.06)	−0.16** (0.06)
	50-55 years	−0.16*** (0.05)	−0.17*** (0.05)	−0.19*** (0.05)	−0.11* (0.06)	−0.18*** (0.06)	−0.11* (0.06)
	Over 55 years	−0.23*** (0.05)	−0.21*** (0.05)	−0.28*** (0.05)	−0.18*** (0.06)	−0.19*** (0.06)	−0.10 (0.06)
Has a child under 6 years old	No	-	-	-	-	-	-
	Yes	0.02 (0.04)	−0.005 (0.03)	0.03 (0.04)	−0.02 (0.04)	−0.01 (0.05)	0.005 (0.05)
Has a child between 6 and 17 years old	No	-	-	-	-	-	-
	Yes	0.13*** (0.03)	0.13*** (0.03)	0.12*** (0.03)	0.13*** (0.04)	0.12*** (0.04)	0.14*** (0.04)
Observations		30,953	33,862	30,953	26,224	11,181	15,656

*Note:*

(1) Baseline regression, (2) Sample: including workers without SIRET, (3) With 3-digit PCS,  
(4) Sample: Non-executives, (5) Sample: Teleworkable jobs, (6) Sample: Women.

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

		<i>Dependent variable : Telework</i>					
		(1)	(2)	(3)	(4)	(5)	(6)
Partner's telework	Yes	-	-	-	-	-	-
	No	-0.24*** (0.04)	-0.24*** (0.03)	-0.24*** (0.04)	-0.21*** (0.05)	-0.23*** (0.04)	-0.23*** (0.05)
	Partner not employed	-0.17*** (0.04)	-0.18*** (0.04)	-0.18*** (0.04)	-0.19*** (0.06)	-0.14*** (0.05)	-0.18*** (0.06)
	No partner	-0.22*** (0.04)	-0.23*** (0.04)	-0.21*** (0.04)	-0.29*** (0.05)	-0.18*** (0.05)	-0.27*** (0.05)
Occupation	Intermediate professions	-	-	-	-	-	-
	Managers and professionals	0.54*** (0.03)	0.55*** (0.03)			0.12*** (0.04)	0.35*** (0.04)
	Employees	-0.32*** (0.04)	-0.36*** (0.03)		-0.40*** (0.03)	-0.20*** (0.05)	-0.38*** (0.04)
	Blue collars	-1.66*** (0.08)	-1.64*** (0.07)		-1.62*** (0.08)	-0.34** (0.15)	-1.67*** (0.13)
Net monthly salary	1500 to 2000€	-	-		-	-	-
	0 to 1000€	-0.31*** (0.07)	-0.31*** (0.07)	-0.14* (0.08)	-0.32*** (0.07)	-0.07 (0.10)	-0.31*** (0.08)
	1000 to 1500€	-0.17*** (0.04)	-0.16*** (0.04)	-0.08* (0.05)	-0.18*** (0.04)	0.0001 (0.06)	-0.21*** (0.06)
	2000 to 2500€	0.13*** (0.04)	0.14*** (0.03)	0.18*** (0.04)	0.13*** (0.04)	0.04 (0.05)	0.16*** (0.04)
	2500 to 3000€	0.29*** (0.04)	0.31*** (0.04)	0.36*** (0.05)	0.24*** (0.05)	0.27*** (0.06)	0.35*** (0.06)
	3000 to 3500€	0.35*** (0.05)	0.34*** (0.05)	0.40*** (0.06)	0.29*** (0.08)	0.27*** (0.07)	0.27*** (0.07)
	3500 to 4000€	0.43*** (0.06)	0.45*** (0.06)	0.46*** (0.06)	0.11 (0.14)	0.36*** (0.08)	0.35*** (0.10)
	More than 4000€	0.50*** (0.06)	0.53*** (0.05)	0.52*** (0.06)	0.71*** (0.14)	0.40*** (0.07)	0.57*** (0.09)
Job tenure	Less than one year	-	-	-	-	-	-
	From 1 to less than 5 years	0.14*** (0.04)	0.11*** (0.04)	0.20*** (0.04)	0.06 (0.05)	0.21*** (0.05)	0.14*** (0.05)
	From 5 to less than 10 years	0.10** (0.04)	0.08* (0.04)	0.16*** (0.05)	0.05 (0.05)	0.20*** (0.06)	0.15** (0.06)
	10 years or more	0.02 (0.04)	0.01 (0.04)	0.09** (0.05)	0.02 (0.05)	0.14** (0.06)	0.06 (0.06)
Observations		30,953	33,862	30,953	26,224	11,181	15,656

*Note:*

(1) Baseline regression, (2) Sample: including workers without SIRET, (3) With 3-digit PCS,  
(4) Sample: Non-executives, (5) Sample: Teleworkable jobs, (6) Sample: Women.

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

		<i>Dependent variable : Telework</i>					
		(1)	(2)	(3)	(4)	(5)	(6)
Supervisory task	Yes, it is the main task	-	-	-	-	-	-
	Yes, but it is not the main task	0.15*** (0.03)	0.16*** (0.03)	0.14*** (0.04)	0.11** (0.05)	0.08* (0.04)	0.05 (0.05)
	No	0.17*** (0.03)	0.19*** (0.03)	0.15*** (0.04)	0.15*** (0.05)	0.08** (0.04)	0.09* (0.05)
Living space per person	Less than 20m <sup>2</sup>	-	-	-	-	-	-
	Between 20 and 30m <sup>2</sup>	0.13*** (0.04)	0.16*** (0.04)	0.12*** (0.04)	0.18*** (0.05)	0.08 (0.05)	0.19*** (0.05)
	More than 30m <sup>2</sup>	0.22*** (0.04)	0.23*** (0.04)	0.19*** (0.04)	0.24*** (0.05)	0.16*** (0.05)	0.24*** (0.05)
Size of the attraction area (AAV) and municipality category	Paris hub	-	-	-	-	-	-
	Paris suburb	-0.30*** (0.06)	-0.21*** (0.06)	-0.28*** (0.07)	-0.28*** (0.09)	-0.11 (0.09)	-0.23*** (0.09)
	Hub of an AAV with more than 700k (excluding Paris)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.003 (0.05)	-0.10* (0.05)	-0.06 (0.05)
	Suburb of an AAV with more than 700k (excluding Paris)	-0.24*** (0.04)	-0.23*** (0.04)	-0.24*** (0.05)	-0.19*** (0.06)	-0.28*** (0.06)	-0.21*** (0.06)
	Hub of an AAV with 200k to 700k inhabitants	-0.22*** (0.05)	-0.20*** (0.04)	-0.21*** (0.05)	-0.15*** (0.06)	-0.31*** (0.06)	-0.23*** (0.06)
	Suburb of an AAV with 200k to 700k inhabitants	-0.31*** (0.04)	-0.29*** (0.04)	-0.29*** (0.05)	-0.27*** (0.05)	-0.42*** (0.06)	-0.28*** (0.06)
	Hub of an AAV with 50k to 200k inhabitants	-0.41*** (0.06)	-0.38*** (0.06)	-0.42*** (0.06)	-0.34*** (0.07)	-0.50*** (0.07)	-0.41*** (0.08)
	Suburb of an AAV with 50k to 200k inhabitants	-0.51*** (0.05)	-0.48*** (0.05)	-0.51*** (0.05)	-0.40*** (0.06)	-0.56*** (0.07)	-0.41*** (0.07)
	Hub of an AAV dwith less than 50k inhabitants	-0.44*** (0.07)	-0.43*** (0.07)	-0.44*** (0.08)	-0.37*** (0.08)	-0.45*** (0.09)	-0.46*** (0.09)
	Suburb of an AAV with less than 50k inhabitants	-0.50*** (0.06)	-0.48*** (0.06)	-0.46*** (0.06)	-0.47*** (0.07)	-0.48*** (0.08)	-0.50*** (0.08)
	Municipality outside the attraction of cities	-0.54*** (0.07)	-0.47*** (0.06)	-0.48*** (0.07)	-0.51*** (0.08)	-0.40*** (0.09)	-0.50*** (0.08)
Observations		30,953	33,862	30,953	26,224	11,181	15,656

*Note:*

(1) Baseline regression, (2) Sample: including workers without SIRET, (3) With 3-digit PCS,  
 (4) Sample: Non-executives, (5) Sample: Teleworkable jobs, (6) Sample: Women.

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

		<i>Dependent variable : Telework</i>					
		(1)	(2)	(3)	(4)	(5)	(6)
Home-to-work distance	Less than 5 km	-	-	-	-	-	-
	Between 5 and 10 km	0.05 (0.04)	0.05 (0.04)	0.05 (0.04)	-0.001 (0.05)	0.09* (0.05)	0.03 (0.05)
	Between 10 and 20 km	0.17*** (0.04)	0.17*** (0.04)	0.16*** (0.04)	0.08* (0.05)	0.23*** (0.05)	0.15*** (0.05)
	Between 20 and 50 km	0.28*** (0.04)	0.27*** (0.04)	0.28*** (0.04)	0.26*** (0.05)	0.33*** (0.05)	0.30*** (0.05)
	Between 50 and 100 km	0.57*** (0.06)	0.56*** (0.06)	0.60*** (0.06)	0.53*** (0.07)	0.61*** (0.08)	0.66*** (0.09)
	More than 100 km	0.67*** (0.05)	0.65*** (0.05)	0.68*** (0.06)	0.60*** (0.07)	0.89*** (0.07)	0.58*** (0.09)
Max. number of telework days in the agreement	No day	-	-	-	-	-	-
	1 day	0.08* (0.04)	0.08* (0.04)	0.11** (0.05)	0.09 (0.06)	0.09 (0.05)	0.14** (0.06)
	2 days	0.09** (0.04)	0.09** (0.04)	0.09** (0.04)	0.08 (0.05)	0.15*** (0.05)	0.03 (0.06)
	3 days	0.17*** (0.06)	0.17*** (0.06)	0.22*** (0.06)	0.22** (0.09)	0.32*** (0.08)	0.05 (0.09)
	4 days or more	0.33** (0.14)	0.33** (0.14)	0.32** (0.15)	0.50*** (0.18)	0.16 (0.18)	0.25 (0.25)
Proportion of managers and professionals in the enterprise	Less than 20%	-	-	-	-	-	-
	Between 20 and 40%	0.33*** (0.03)	0.32*** (0.03)	0.32*** (0.04)	0.38*** (0.04)	0.21*** (0.04)	0.38*** (0.05)
	More than 40%	0.62*** (0.03)	0.62*** (0.03)	0.59*** (0.04)	0.68*** (0.05)	0.45*** (0.04)	0.64*** (0.05)
Enterprise category	Intermediate-sized enter- prises	-	-	-	-	-	-
	Micro-enterprises	-0.10** (0.05)	-0.10** (0.05)	-0.05 (0.05)	-0.06 (0.06)	-0.08 (0.06)	-0.18*** (0.06)
	SMEs	-0.10*** (0.04)	-0.10*** (0.04)	-0.07* (0.04)	-0.06 (0.04)	-0.15*** (0.05)	-0.16*** (0.05)
	Large enterprises	-0.03 (0.03)	-0.03 (0.03)	-0.01 (0.04)	-0.08* (0.05)	0.05 (0.05)	-0.04 (0.05)
Observations		30,953	33,862	30,953	26,224	11,181	15,656

*Note:*

(1) Baseline regression, (2) Sample: including workers without SIRET, (3) With 3-digit PCS,  
(4) Sample: Non-executives, (5) Sample: Teleworkable jobs, (6) Sample: Women.

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

		<i>Dependent variable : Telework</i>					
		(1)	(2)	(3)	(4)	(5)	(6)
Group origin	French-only enterprises	-	-	-	-	-	-
	Foreign multinationals	0.21*** (0.04)	0.21*** (0.04)	0.21*** (0.05)	0.16*** (0.06)	0.32*** (0.06)	0.23*** (0.06)
	French multinationals	0.14*** (0.04)	0.14*** (0.04)	0.16*** (0.04)	0.07 (0.05)	0.20*** (0.05)	0.15*** (0.05)
Controls		✓	✓	✓	✓	✓	✓
Observations		30,953	33,862	30,953	26,224	11,181	15,656

*Note:*

(1) Baseline regression, (2) Sample: including workers without SIRET, (3) With 3-digit PCS,  
(4) Sample: Non-executives, (5) Sample: Teleworkable jobs, (6) Sample: Women.

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01



## D OLS firm fixed-effects

	Coef.	R. Std. Err.	$P >  t $
<b>Man. Ref. woman</b>	-0.085	0.009	0.000
<b>Age class. Ref 30-35</b>			
1. Less than 20	-0.010	0.025	0.700
2. 20-25	-0.052	0.017	0.002
3. 25-30	-0.023	0.017	0.174
5. 35-40	-0.014	0.017	0.409
6. 40-45	0.000	0.017	0.987
7. 45-50	-0.025	0.017	0.148
8. 50-55	-0.031	0.017	0.066
9. More than 55	-0.032	0.017	0.052
Child age below 6 Yes	-0.002	0.013	0.891
Child age 6-17 Yes	0.015	0.010	0.147
<b>Partner. Ref. teleworker</b>			
Non-teleworker	-0.033	0.015	0.030
Non-salaried	-0.049	0.017	0.004
No partner	-0.031	0.016	0.051
<b>Occupation Ref. manager</b>			
Intermediary occupations	-0.254	0.018	0.000
Employee	-0.301	0.020	0.000
Blue-collar	-0.409	0.019	0.000
<b>Monthly net wage in Euros. Ref. 1500-2000</b>			
0-1000	-0.014	0.017	0.425
1000-1500	-0.012	0.011	0.276
2000-2500	0.032	0.013	0.012
2500-3000	0.059	0.018	0.001
3000-3500	0.129	0.023	0.000
3500-4000	0.149	0.027	0.000
More than 4000	0.169	0.024	0.000
<b>Tenure. Ref &lt; 1 year</b>			
1-5	0.042	0.014	0.002
5-10	0.046	0.016	0.004
10 or more	0.029	0.016	0.065
<b>Supervision task. Ref. main task</b>			
Secondary task	0.059	0.014	0.000
No	0.064	0.014	0.000
<b>Home surface per person. Ref. &lt; 20 m<sup>2</sup></b>			
Between 20 and 30m <sup>2</sup>	0.018	0.013	0.143
More than 30m <sup>2</sup>	0.031	0.013	0.016
<b>Distance</b>			
2. 5-10 km	0.020	0.012	0.116
3. 10-20 km	0.030	0.013	0.018
4. 20-50 km	0.053	0.014	0.000
5. 50-100 km	0.096	0.024	0.000
6. More than 100 km	0.087	0.026	0.001
Size of the attraction zone and type of area	✓		
Controls	✓		
Number of observations	12,199		$R^2 = 0.667$