Firms, Flexibility and Fertility*

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Abstract

This chapter examines how workplace flexibility shapes female labor market outcomes and fertility. Using a range of data sources—including labor force surveys, time-use surveys, and administrative records from Spain—we show that rigid schedules, split shifts, and long working hours raise the time cost of childcare, reducing women's participation, wage growth, and career progression. Flexible arrangements facilitate work–family balance but are unevenly distributed across firms, sectors, and occupations. We develop simple models in which job inflexibility lowers both labor force participation and fertility by increasing the cost of combining work and motherhood, and in which firm flexibility affects outcomes on both the labor supply and labor demand sides of the market. We then review the literature on the value of flexibility, the costs of family-friendly policies, and the role of firm behavior. A central message is that the effects of flexibility and related policies depend critically on firm responses and the organization of work: while greater flexibility can support fertility, it may also generate unintended consequences through hiring, promotion, and wage-setting decisions.

Keywords: Fertility, Firms, Flexibility, Family-Friendly Policies, Gender Gaps
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1 Introduction

Low fertility has become a defining demographic challenge for many high-income countries. Birth rates in much of Europe, East Asia, and North America have fallen significantly below the replacement level, raising concerns about the sustainability of welfare systems, pension financing, and the long-term economic growth potential of these regions. These changes are not unique to high-income countries and are part of what one might call a global fertility decline (Delventhal et al., 2024). Population aging, driven by longer life expectancy and declining birth rates, will shrink the working-age population, increasing the fiscal burden on younger generations and potentially altering the balance between work, family, and leisure worldwide. Understanding the forces behind low fertility is therefore a pressing priority for both researchers and policymakers.

A rich literature has examined the role of economic conditions, cultural norms, and family policies in shaping fertility trends; see Greenwood et al. (2017), Doepke et al. (2023), Hannusch and Yum (2026), and Nakakuni et al. (2026) for recent reviews. Yet, the role of firms and workplace arrangements has received comparatively less attention. The organization of work is central to the ability of individuals, particularly women, to combine employment and family life. Jobs that require long, rigid hours, offer little control over schedules, or involve long commutes increase the time cost of children and can make childbearing less feasible. In contrast, workplace flexibility and supportive family-friendly policies can reduce this time cost and facilitate higher fertility rates. At the same time, providing flexibility is not costless for firms. When workers reduce hours, take leave, or demand more adaptable schedules, firms may need to reorganize production, reallocate tasks, or adjust hiring and promotion decisions. These firm responses, combined with social norms that place a disproportionate share of childcare on women, can generate persistent gender inequalities and may offset some of the intended effects of family-friendly policies (Feyrer et al., 2008; Doepke and Kindermann, 2019).

In this chapter, we examine how workplace flexibility, firm behavior, and family-friendly policies jointly shape female labor market outcomes and fertility decisions, with a particular focus on the Spanish labor market. Spain provides a useful case study because it combines very low fertility with relatively non-flexible work arrangements, including the prevalence of split-shift schedules and long working hours. Furthermore, the distribution of caregiving within households remains highly unequal, with mothers assuming a disproportionate share of responsibilities (Sánchez-Marcos, 2023). More broadly, the Spanish case illustrates a general point relevant beyond Spain: the

effects of flexibility on fertility depend not only on workers' preferences and constraints but also on how flexibility is distributed across jobs and how firms respond when workers use it.

The chapter proceeds in three steps. Section 2 measures job inflexibility and documents its consequences. We begin with a simple model in which inflexible jobs raise the time cost of children and thereby reduce female labor force participation and fertility. We then present cross-country evidence showing that more rigid work arrangements are associated with lower female employment and lower fertility, and provide detailed evidence for Spain on split-shift schedules, long working hours, fertility, and wage growth. We also review evidence on the value and costs of flexibility.

Section 3 brings firms explicitly into the analysis. We first present a simple model in which flexibility affects both sides of the market: it lowers the cost of combining work and motherhood for women, but it also reduces the productivity loss that firms incur when workers have children. We then discuss recent quantitative equilibrium models showing how firm responses shape employment, wages, promotions, and fertility, and why policy effects can differ substantially once these responses are taken into account.

Finally, Section 4 focuses on family-friendly policies. We review evidence on the costs such policies impose on firms, show that these costs and the associated margins of adjustment vary systematically with firm size, and discuss how policies intended to improve work-family balance can also generate unintended consequences through firms' hiring, promotion, and wage-setting decisions. Taken together, the evidence and models in this chapter highlight a central theme: workplace flexibility can support both female employment and fertility, but its effects depend critically on firm incentives, the organization of work, and the broader institutional environment.

2 Measuring Job Inflexibility and Its Consequences

The concept of flexibility and its relevance to gender gaps in labor market outcomes was first introduced by Goldin (2014), who emphasized that gender pay gaps might persist because firms disproportionately reward long, rigid working hours. Flexibility is multidimensional, encompassing not only the number of hours worked but also the specific timing, unpredictability, and regularity of those hours.

As Goldin (2014, p. 1092) noted, "The gender gap in pay would be considerably reduced and might even vanish if firms did not have an incentive to disproportionately reward individuals who worked long hours and who worked particular hours." Flexible jobs enable workers with family responsibilities to adjust their hours or schedules without incurring wage or promotion penalties. Non-flexible jobs, by contrast,

reward face time, predictability, and continuous availability, disadvantaging workers with caregiving duties. If social norms place an unequal burden of childcare on women, clearly, non-flexible workplace arrangements will make having children costly for women, forcing them to trade off having children with their earnings and careers.

2.1 A Simple Model of Job Inflexibility and Fertility

In this section, we present a simple model to illustrate how job inflexibility increases children's time costs, thereby reducing both female labor force participation and fertility. The model is static and is populated by a unit measure of ex-ante homogeneous women who choose how many children to have and whether to participate in the labor market. Women value consumption, leisure, and children. Preferences over the number of children, n, are given by an increasing and concave function $u(n)$.

Timing within a period is as follows. Women first choose fertility. Conditional on this choice, they draw an idiosyncratic taste shock for staying at home, denoted by ϵ, which is distributed according to the density $\gamma(\epsilon)$. For tractability, we assume that $\gamma(\epsilon)$ is a Frechet distribution with shape parameter 1. Hence, fertility decisions are made before the taste shock is realized. Finally, given n and ϵ, women decide whether to work or not. Each woman has a time endowment $\bar{H}$. If she does not work, she consumes b, which captures home production, enjoys leisure $\bar{H}$, and receives the additional value of staying at home, ϵ. If she works, she supplies a fixed number of hours, $\bar{h}$, and earns labor income $w\bar{h}$.

A working mother has less leisure time. In addition to market work, her leisure is reduced by Tn, where T captures the additional time cost per child associated with working in an inflexible job. In our context, T summarizes all sources of job inflexibility, such as rigid schedules, long working hours, lack of control over start and end times, commuting during fixed hours, or the extra childcare burden caused by late workdays. If T is low, jobs are relatively flexible, and the cost of combining work and children is low. If T is high, jobs are inflexible, making it harder for mothers to reconcile work and family.[1] We formalize these ideas as follows.

As fertility is chosen before observing ϵ, the problem for a woman is

$$V = \max_{n} \left[\int_{\epsilon} V(n, \epsilon) \gamma(\epsilon) \, d\epsilon + u(n) \right], \tag{1}$$

where $V(n, \epsilon)$ is the maximum between the value of participating in the labor market,

[1] In what follows, we assume $\bar{H}$ is large enough s.t. $\bar{H} - Tn - \bar{h} > 0, \forall T \geq 0$.

$V^w(n)$, and the value of staying out of the labor force, $V^o(\epsilon)$, i.e.,

$$V(n, \epsilon) = \max \left\{ V^w(n),\, V^o(\epsilon) \right\}.$$

The value of working is

$$V^w(n) = \log(w\bar{h}) + \log(\bar{H} - Tn - \bar{h}), \tag{2}$$

while the value of not working is

$$V^o(\epsilon) = \log(b) + \log(\bar{H}) + \log(\epsilon). \tag{3}$$

Hence, women trade off higher income when employed, $w\bar{h}$ rather than b, against lower leisure. This trade-off becomes more severe as job inflexibility T rises and as the number of children n increases.

Participation decision. Conditional on the number of children n and a realization of the taste shock ϵ, women choose to work if

$$V^w(n) \geq V^o(\epsilon).$$

Substituting from (2) and (3), this condition becomes

$$\log(w\bar{h}) + \log(\bar{H} - Tn - \bar{h}) \geq \log(b) + \log(\bar{H}) + \log(\epsilon).$$

Because ϵ is Frechet distributed with shape parameter 1, $\log(\epsilon)$ is a Gumbel random variable with location parameter 0 and scale parameter 1. Therefore, the participation decision has the familiar logit structure, and the female labor force participation rate (FLFP), that is, the share of women who participate in the labor market, is given by

$$\text{FLFP}(n) = \frac{\exp\left(\log(w\bar{h}) + \log(\bar{H} - Tn - \bar{h})\right)}{\exp\left(\log(w\bar{h}) + \log(\bar{H} - Tn - \bar{h})\right) + \exp\left(\log(b) + \log(\bar{H})\right)}.$$

This simplifies to

$$\text{FLFP}(n) = \frac{w\bar{h}\left[\bar{H} - Tn - \bar{h}\right]}{w\bar{h}\left[\bar{H} - Tn - \bar{h}\right] + b\bar{H}} = \frac{1}{1 + \dfrac{b\bar{H}}{w\bar{h}\left[\bar{H} - Tn - \bar{h}\right]}}. \tag{4}$$

How does labor force participation vary with T, the level of job inflexibility? When

the number of children is positive, $n > 0$,

$$\frac{\partial \text{FLFP}(n)}{\partial T} < 0 \qquad \text{and} \qquad \frac{\partial^2 \text{FLFP}(n)}{\partial T \partial n} < 0.$$

Thus, greater job inflexibility makes mothers less likely to work, and this effect is stronger for women with more children. This follows because

$$\frac{\partial}{\partial T}\left(\frac{b\bar{H}}{w\bar{h}\left[\bar{H} - Tn - \bar{h}\right]}\right) = \frac{b\bar{H}n}{w\bar{h}\left[\bar{H} - Tn - \bar{h}\right]^2} > 0,$$

so the denominator term inside (4) rises with T, lowering participation. Moreover,

$$\frac{\partial^2 \frac{b\bar{H}}{w\bar{h}[\bar{H}-Tn-\bar{h}]}}{\partial T \partial n} = \frac{b\bar{H}w\bar{h}\left(w\bar{h}[\bar{H} - Tn - \bar{h}]\right)^2 - b\bar{H}w\bar{h}n2(w\bar{h}[\bar{H} - Tn - \bar{h}])w\bar{h}(-T)}{\left(w\bar{h}[\bar{H} - Tn - \bar{h}]\right)^4} > 0,$$

implying that the negative effect of T on participation is larger when n is higher. This yields our first result.

Proposition 1. *The labor force participation rate of mothers is lower when job schedules are more inflexible, and this negative effect is stronger the larger the number of children in the household.*

In the model, job inflexibility, as captured by higher values of T, reduces labor force participation, especially for mothers. When jobs are fully flexible, that is, when $T = 0$, the value of working does not depend on the number of children. When jobs are more inflexible, the value of employment is lower for mothers, and women with more children are less likely to participate in the labor market.

Fertility choice. We now turn to fertility. Women choose how many children to have before the realization of the taste shock ϵ. Because ϵ is Frechet distributed with shape parameter 1, $\log(\epsilon)$ is Type-I extreme value, and the expected value of the participation decision has the standard log-sum form. Hence, equation (1) can be written as

$$\max_n \quad \log\left[\exp\left(V^w(n)\right) + \exp\left(\log(b) + \log(\bar{H})\right)\right] + u(n). \tag{5}$$

Substituting (2) into (5), the fertility problem becomes

$$\max_n \quad \log\left(w\bar{h}\left[\bar{H} - Tn - \bar{h}\right] + b\bar{H}\right) + u(n).$$

Assuming an interior solution, the optimal number of children satisfies the first-

order condition

$$\frac{-w\bar{h}T}{w\bar{h}\left[\bar{H}-Tn-\bar{h}\right]+b\bar{H}}+u'(n)=0.$$

The marginal utility of an additional child is therefore equated to its expected marginal cost. A higher level of job inflexibility raises this marginal cost by reducing the value of employment when children are present. By the implicit function theorem,

$$\frac{\partial n}{\partial T}=-\frac{\frac{-w\bar{h}(w\bar{h}[\bar{H}-Tn-\bar{h}]+b\bar{H})-w\bar{h}T(w\bar{h}n)}{(w\bar{h}[\bar{H}-Tn-\bar{h}]+b\bar{H})^2}}{\frac{-w\bar{h}w\bar{h}T^2}{(w\bar{h}[\bar{H}-Tn-\bar{h}]+b\bar{H})^2}+\frac{\partial^2 u(n)}{\partial n\partial n}}<0,$$

which yields our second result.

Proposition 2. *The optimal fertility choice decreases as job inflexibility increases.*

In the model, a higher value of T lowers the expected return to having children by increasing the time cost of combining work and motherhood. As a result, women optimally choose fewer children when jobs are more inflexible.

2.2 Cross-Country Evidence on Job Inflexibility, Female Employment, and Fertility

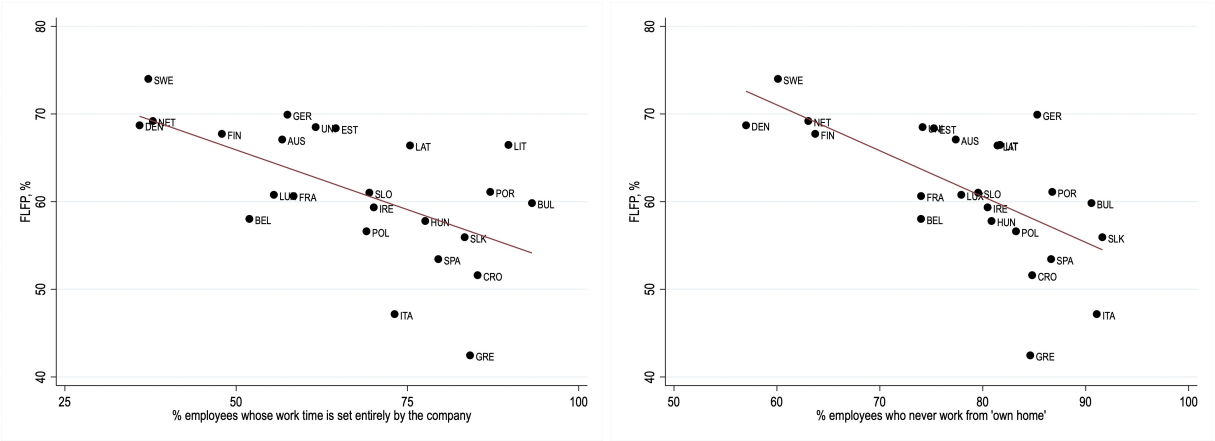
In this section, we present cross-country evidence showing that higher job inflexibility is associated with lower female labor force participation and fertility. We also show that, within countries, women are systematically underrepresented in inflexible occupations relative to men.

Figure 1 shows a clear negative relationship between job inflexibility and women's labor force participation across OECD countries. Panel A relates participation to schedule rigidity, while Panel B focuses on the lack of remote work opportunities. In both cases, countries with more rigid work arrangements tend to exhibit lower female participation rates. For example, in Spain, nearly 80% of women report that their work hours are entirely set by their employers, compared to less than 50% in countries such as Sweden, Denmark, and the Netherlands. Panel B shows a similar pattern: female labor force participation is lower in countries where a larger share of workers never work from home.

Figure 2 shows that these measures of job inflexibility are also negatively associated with total fertility rates. Countries with more rigid schedules and limited remote work tend to have fewer births per woman, consistent with the model's prediction that higher time costs of children reduce fertility.

Figure 1: Job Flexibility and Female Labor Force Participation

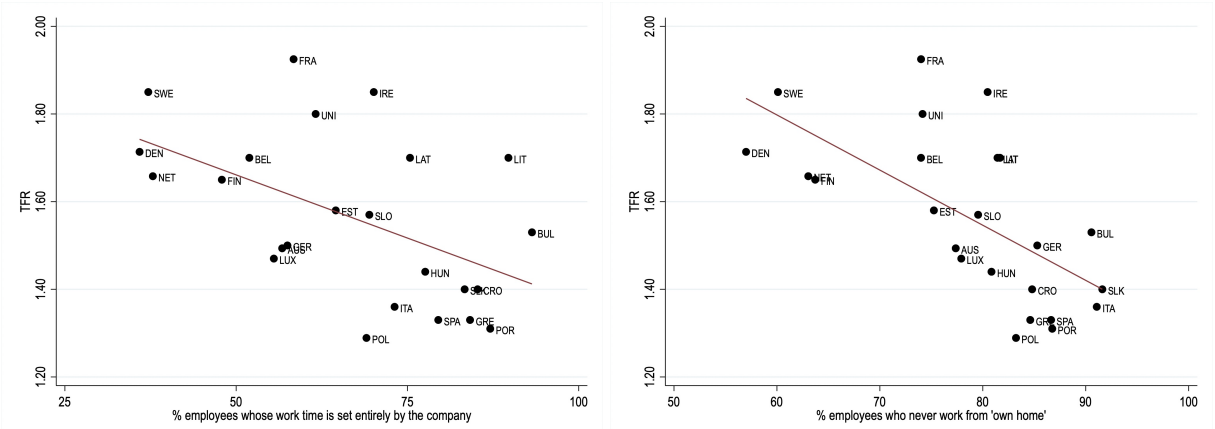
(A) Rigid working schedule **(B)** Never working from home



NOTES: This figure shows female labor force participation (FLFP) across OECD countries against the percent of employees whose work time is entirely set by the employers (panel A) and the percent of employees who never work from home (panel B). FLFP refers to the proportion of employed women among those in the working-age population in 2015, expressed as a percentage. The sample refers to employees aged 16 years and older. SOURCE: The OECD Family Database.

Figure 2: Flexibility and Total Fertility Rate

(A) Rigid working schedule **(B)** Never working from home



NOTES: This figure shows total fertility rate (TFR) across OECD countries against the percent of employees whose work time is entirely set by the employers (panel A) and the percent of employees who never work from home (panel B). TFR refers to the number of births per woman in 2015. The sample refers to employees aged 16 years and older. SOURCE: The OECD Family Database.

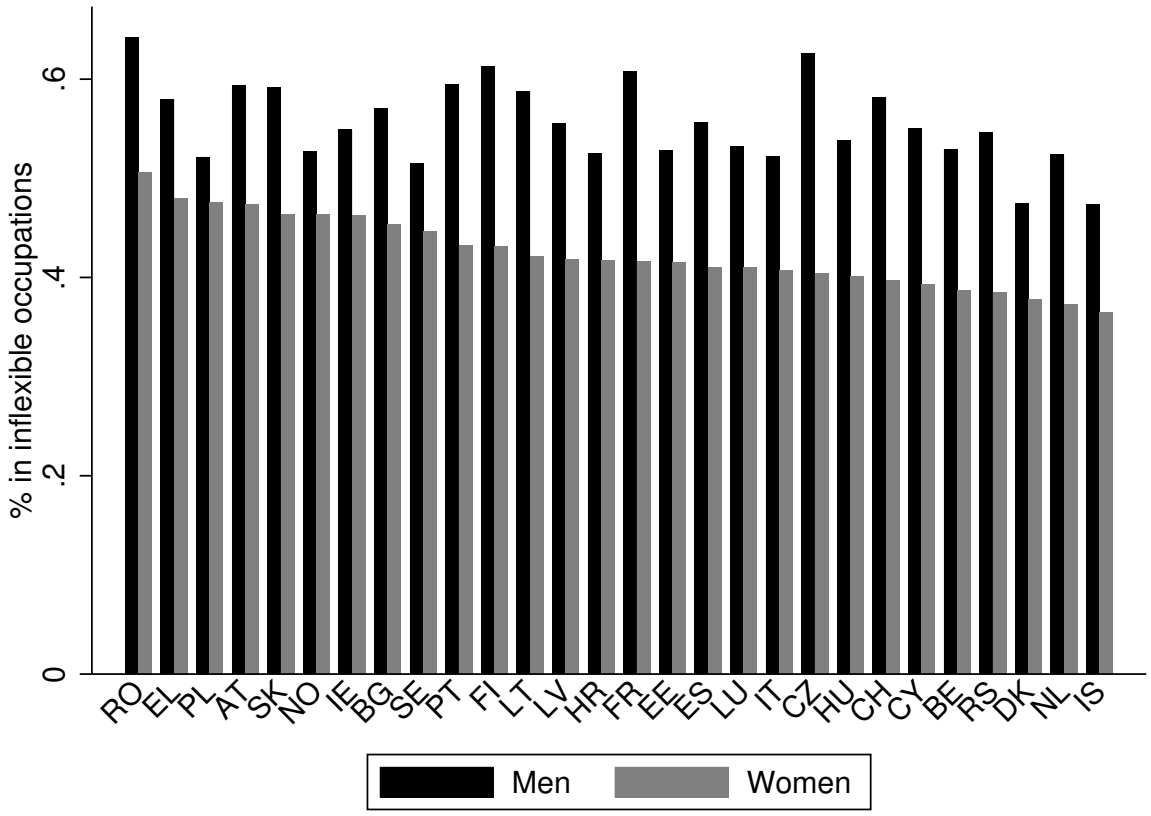
Finally, we examine how men and women are distributed across occupations that differ in the prevalence of long working hours. The key idea is that occupations with a high incidence of long hours are more difficult to combine with household duties and childcare responsibilities (Cortés and Pan, 2017; Erosa et al., 2022).

Following Bover et al. (2025), we construct a measure of job inflexibility based on the share of men working more than 50 hours per week in each occupation. Occupations with a below-median share are classified as flexible, while those above the

median are classified as non-flexible.[2]

Using data from the EU Statistics on Income and Living Conditions (EU-SILC), Figure 3 shows that women are systematically underrepresented in inflexible industries.[3] Countries are ranked by the share of female employment in non-flexible industries, from the highest (Romania, 50.6%) to the lowest (Iceland, 36.4%). The gender gap is positive in every country and quantitatively large. In all cases, women's share is below men's, with an average gap of about 23.4%.

Figure 3: Non-flexible Employment by Country and Gender, 2019



NOTES: The sample refers to employees aged 25-54. Inflexibility is defined as an occupation score at or above the country median. The occupation score is constructed based on the US share of male workers working more than 50 hours/week by occupation. SOURCE: EU-SILC 2019 cross-sectional data.

[2]Using the 2010 American Community Survey (ACS), we first compute the share of men working more than 50 hours per week in each Standard Occupational Classification (SOC) occupation. We use the U.S. occupational distribution to avoid confounding effects from country-specific policies. We then aggregate these occupational shares to the industry level using employment weights and map U.S. industry codes (NAICS) to the industry classification in EU-SILC.

[3]The EU-SILC provides harmonized cross-sectional and longitudinal data on income, poverty, social exclusion, and living conditions across EU countries.

2.3 Spain: Work Schedules, Fertility, and Wages

As the cross-country evidence in the previous section suggests, the organization of work schedules matters for female labor market participation and fertility. In this section, we turn to microdata to examine these relationships in greater detail, focusing on how non-flexible work arrangements affect labor supply, wages, and fertility outcomes.

We focus on Spain as a particularly informative case. Among high-income, low-fertility countries, Spain stands out for having the highest incidence of childlessness and the lowest share of women with two or more children in recent decades (Guner et al., 2024). At the same time, the organization of work is characterized by limited flexibility in schedules. In particular, as emphasized by Guner et al. (2024), split-shift schedules—where a long midday break divides the workday and pushes its end well into the evening—remain widespread.

Figure 4 illustrates this feature. By 6 pm, fewer than 20% of workers remain at work in countries such as Norway and the UK, compared to about 50% in Spain. These differences highlight how the timing of work, not just the number of hours worked, can make it more difficult to combine employment with childcare.

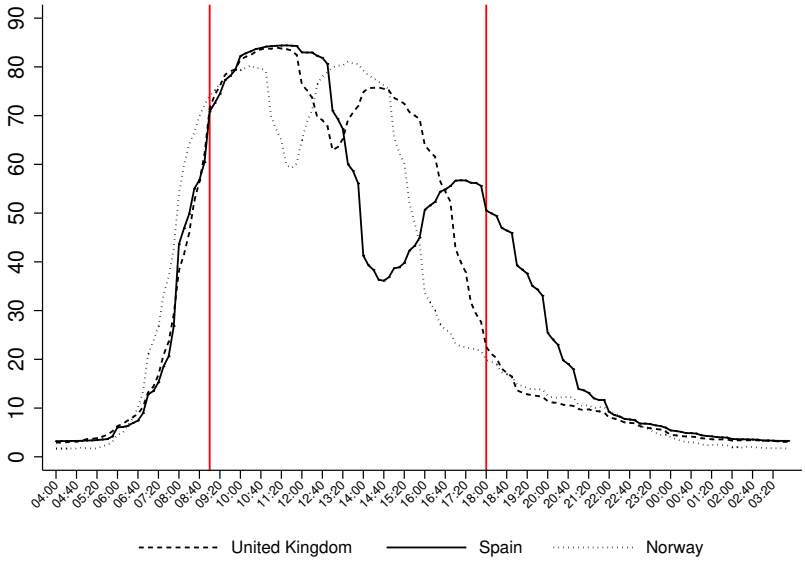
We next document how these features of work organization differ by gender and how they relate to wages and fertility outcomes. Subsection 2.3.1 examines gender gaps in work schedule characteristics, while Subsection 2.3.2 links these differences to labor market outcomes and fertility. To do so, we draw on several complementary data sources: the Labor Force Survey (including two special modules), the Time Use Survey (TUS), the Salary Structure Survey (SSS), and the Continuous Sample of Working Lives (MCVL). Appendix A provides further details on these datasets.

2.3.1 Gender Differences in Work Schedule Characteristics

We begin by documenting gender differences in key dimensions of work schedule organization. Work schedules differ not only in the number of hours worked, but also in how those hours are distributed over the day and in the degree of worker control over their timing. These features are central to reconciling work and caregiving responsibilities. In what follows, we focus on four indicators of job inflexibility: split-shift schedules, long working hours, worker autonomy over the start and end of the workday, and part-time employment.

Table 1 summarizes these indicators by gender. Panel A reports statistics for all employees aged 25-54. Men are substantially more likely than women to work split shifts: 44.7% of men, compared with 30.5% of women, report this type of schedule. Panel A

Figure 4: Fraction of People at Work at Different Times of the Day



NOTES: The sample is restricted to 25-54-year-old employees who filled the diary on an ordinary working day. The figure shows the fraction of respondents who report employment as their main activity (main or second job and employment-related activities) at different times of day. The vertical lines mark 9 am and 6 pm. SOURCE: Harmonized European Time Use Surveys (HETUS) database, www.tus.scb.se (accessed on 8/11/2018).

of Figure 5 complements this fact by plotting the female employment share against the degree of inflexibility of each occupation, measured by the share of men employed in split-shift jobs. The relationship is clearly negative, indicating that women are less represented in occupations where split-shift schedules are more prevalent.

Table 1: Work Schedule Characteristics by Gender

	Men (%)	Women (%)
Panel A. All employees		
Split-shift work schedule	44.68	30.49
Employer sets start/end of the daily work schedule	78.90	79.80
Long working hours sectors	43.77	38.13
Part-time job	3.64	22.99
Panel B. Employees with own children in the household		
Split-shift work schedule	44.30	26.52
Employee cannot adjust start/end for caring	44.30	38.20
Long working hours sectors	44.77	39.64
Part-time job	2.68	26.57

NOTES: Panel A refers to employees aged 25-54. Panel B refers to employees aged 25-54 with their own children in the household. SOURCES: Spanish Time Use Survey 2009-2010, Spanish Labor Force Survey 2018 Special Module on Reconciliation of Work and Family, Spanish Labor Force Survey 2019 Special Module on Organization of Workday and Spanish Social Security Records 2011-2015.

Worker control over the timing of the workday is also very limited. As shown in Panel A of Table 1, 78.9% of men and 79.8% of women report that the employer determines the start and end of the workday, suggesting that this dimension of inflexibility is broadly similar across genders. By contrast, long working hours display a clearer gender pattern. Sectors with an above-median prevalence of long working hours among men employ fewer women. 38.13% of women work in these inflexible sectors, compared with 43.77% of men. Panel B of Figure 5 illustrates this pattern using Spanish Social Security records (MCVL): each point represents a sector, with the x-axis measuring the share of male workers who exceed 50 hours per week and the y-axis measuring the female share of sectoral employment. Female representation exceeds 60% in highly flexible sectors such as education, but falls below 25% in non-flexible sectors such as construction, highlighting how overwork requirements contribute to occupational segregation.

Part-time employment is also highly gendered. While only 3.6% of men work part-time, the corresponding share for women is 23.0%. Taken together, the evidence in Panel A suggests that women are less likely than men to work in jobs characterized by split shifts or long hours, but much more likely to adjust along the hours margin through part-time employment. This pattern is consistent with the view that, when within-job flexibility is scarce, women absorb caregiving constraints by reducing hours.

Panel B of Table 1 turns to employees with their own children in the household. Gender differences become even more pronounced in this group. The share of fathers working split shifts, 44.3%, is nearly identical to that of men overall, whereas the share of mothers falls to 26.5%, widening the gender gap in split-shift work to almost 18 percentage points. Similarly, 44.3% of fathers report that they cannot adjust the start and end of the workday for caregiving reasons, compared with 38.2% of mothers. The incidence of long-hours work follows the same pattern: fathers are represented in long-hours sectors at roughly the same rate as men overall, whereas mothers are less likely to work in those sectors, 39.6% compared with 44.8% for fathers. Finally, the gender gap in part-time work is even larger among parents: only 2.7% of fathers work part-time, compared with 26.6% of mothers.

These patterns suggest that parenthood sharpens gender differences in how workers adjust to inflexible jobs. Fathers remain heavily represented in split-shift and long-hours jobs, while mothers disproportionately move toward shorter hours or away from the least flexible jobs altogether.

These differences are not limited to schedules and hours; they are also reflected in the occupational hierarchy (Table 2). Men are more likely than women to hold super-

Table 2: Responsibilities at Work

	Men (%)	Women (%)
	A.Overall	
Employee	64.1	76.0
Supervisor	8.1	5.3
Intermediate Manager	8.1	6.6
Manager (Small Firm)	7.6	4.9
Manager (Large Firm)	0.9	0.3
Self-employed	11.2	6.7
	B.With children under 15	
Employee	59.1	73.4
Supervisor	9.2	5.2
Intermediate Manager	9.5	8.0
Manager (Small Firm)	9.6	5.5
Manager (Large Firm)	1.1	0.3
Self-employed	11.4	7.3

NOTES: The sample refers to employees aged 25-54 (Panel A), with children under 15 (Panel B). Entries show the share of workers in each category. SOURCE: The Spanish Labor Force Survey, 2018 Special Module on Reconciliation of Work and Family.

visory, managerial, and self-employed positions, while women are more concentrated in non-supervisory employee roles. These gender gaps become larger among parents. Among workers with children under 15, 73.4% of mothers are in employee (worker) positions, compared with 59.1% of fathers, while 29.4% of fathers hold supervisory or managerial roles, compared with only 19.0% of mothers. This pattern suggests that the same constraints that push mothers away from split-shift and long-hours jobs may also limit their progression into positions with greater responsibility and autonomy.

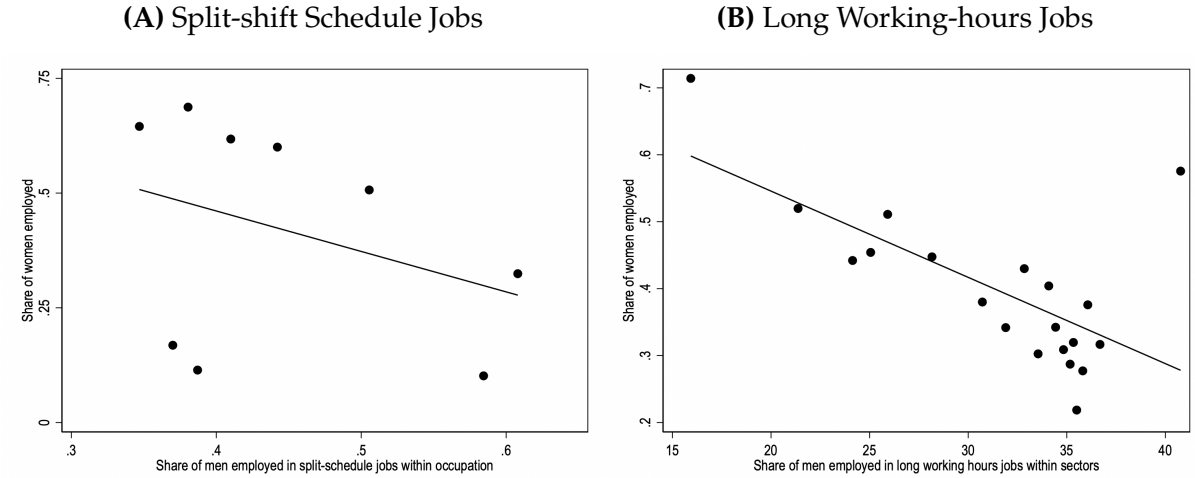
To explore these caregiving-related adjustments more directly, Table 3 reports job-related changes made in response to caregiving responsibilities. As shown, the most common adjustment is a reduction in working hours, with a striking gender gap: 20.7% of women versus only 2.3% of men report cutting back hours. This large female take-up reflects, at least in part, the 1999 Work and Family Reconciliation Act (Law 39/1999), which granted parents of children under 6 the right to reduce their workweek by one-third to one-half of full-time hours with protection from dismissal. The child age limit was later raised to 8 (2007) and 12 (2012).

Other adjustments are much less common. Roughly 5.2% of women and 4.3% of men report adjusting the start and end of the workday, suggesting only limited adaptation along this margin. Likewise, very few workers report changing occupation or firm in response to caregiving responsibilities: 1.7% of women and 1.1% of men. Care-

giving leave is also rare, although more common among women than men, at 1.0% versus 0.2%. Overall, these results indicate that caregiving constraints are absorbed primarily through reductions in working time rather than through job mobility or formal leave, and that this adjustment falls disproportionately on women. One possible interpretation is that some women anticipate future caregiving needs and sort into less demanding roles before motherhood.

Taken together, these indicators underscore that while men are more likely to be exposed to fragmented schedules and long working hours, women disproportionately bear the cost of reduced working hours through part-time arrangements. This pattern reflects the different constraints and trade-offs faced by men and women in balancing work and caregiving, and is consistent with both occupational sorting, with men overrepresented in jobs with fragmented schedules and long hours, and gender differences in the value of flexibility. We now turn from descriptive evidence on sorting and work arrangements to their implications for fertility and wage growth.

Figure 5: Women's Employment in Non-Flexible Jobs



NOTES: The figure reports women's employment as a share of total employment across jobs with different degrees of inflexibility. In panel A, the degree of inflexibility is measured as the percentage of men employed in split-schedule jobs within each 1-digit occupation. In panel B, the degree of inflexibility is measured by the percentage of men working more than 50 hours per week across the 2-digit sector. In both panels, the sample refers to employees aged 25 to 44. SOURCE: Spanish Time Use Survey 2009-2010 and MCVL 2011-2015.

2.3.2 Job Inflexibility, Fertility, and Wage Growth

We now examine how two dimensions of job inflexibility, split-shift schedules and long working hours, relate to fertility and wages. We first study whether motherhood is associated with a lower likelihood of working in these jobs. We then examine whether employment in long-working-hours sectors is associated with lower fertility and slower wage growth for women.

Table 3: Labor Market Changes due to Caregiving Responsibilities

	Men	**Women**
Changes in employment to earn more money	1.2	0.7
Work hours reduction	2.3	20.7
Self-select into less demanding tasks	0.5	0.7
Change in occupation or firm to balance family and work	1.1	1.7
Caregiving leave	0.2	1.0
Adjust start/end	4.3	5.2

NOTES: The sample refers to employees aged 25-54 with caregiving responsibility for children younger than 15. SOURCE: The Spanish Labor Force Survey, 2018 Special Module on Reconciliation of Work and Family.

Split-Shift Work Schedules The Spanish Time Use Survey suggests that for both men and women, split-shift schedules are associated with longer weekly hours, 42.8 hours for men and 38.4 hours for women, compared with 39.4 and 33.9 hours, respectively, under regular schedules. At the same time, hourly pay is lower in split-shift jobs: €8.03 per hour for men and €7.52 per hour for women, compared with €8.95 and €7.97 in regular-schedule jobs. These figures indicate that split shifts impose a time penalty without compensating workers with higher hourly wages, reinforcing the view that constrained availability, rather than preference, may be driving differences in observed flexibility outcomes (Amuedo-Dorantes and de la Rica, 2009). This descriptive evidence suggests that split shifts are not compensated by higher hourly pay, making it natural to ask whether mothers avoid such jobs.

Following Guner et al. (2024), we use the Time Use Survey to examine whether motherhood is associated with a lower likelihood of working a split-shift schedule. To do so, we estimate a series of logistic regression models, with the most expanded specification taking the following form:

$$\Pr(y_i = 1) = L(\alpha + \beta \text{Female}_i + \gamma \mathbf{1}[\geq 1\text{child}]_i + \delta \text{Female}_i \times \mathbf{1}[\geq 1\text{child}]_i + \theta X_i), \quad (6)$$

where the dependent variable y_i equals 1 if employee i works with a split-shift schedule and 0 otherwise. The main explanatory variables are a binary gender indicator (Female_i), a binary indicator for having children ($\mathbf{1}[\geq 1\text{child}]_i$), and their interaction ($\text{Female}_i \times \mathbf{1}[\geq 1\text{child}]_i$). Controls X_i include personal characteristics, such as age, education, and region, household income, and work-related characteristics, including full-time employment, temporary contract status, occupation, industry, the presence of a second job, and an indicator for flexible working hours. Finally, α is a constant.

Table 4 reports estimates of Equation (6). Column (1) includes only the gender indicator, while Column (2) includes only an indicator for having one's own children in

the household. Column (3) introduces both indicators and their interaction, allowing the association between parenthood and split-shift work to differ by gender. The estimates indicate that, for women, parenthood is associated with a significantly lower likelihood of working a split-shift schedule, but not for men. In particular, mothers have odds of working split shifts that are about 56% lower than those of men and women without children.[4] Columns (4)-(6) progressively add controls for personal characteristics, household income, and work-related characteristics. The association for mothers remains statistically significant and similar in magnitude throughout. In the most expanded specification, shown in Column (6), mothers' odds of working a split-shift schedule are about 50% lower than those of men and women without children.

Table 4: Motherhood and the Probability of Working with a Split-shift Schedule

	(1)	(2)	(3)	(4)	(5)	(6)
Female_i	0.422***	-	0.800	0.758	0.757	1.002
	(0.043)		(0.179)	(0.175)	(0.175)	(0.245)
$\mathbf{1}[\geq 1\text{child}]_i$	-	0.691***	1.017	1.143	1.135	1.100
		(0.086)	(0.181)	(0.210)	(0.208)	(0.207)
$\text{Female}_i \times \mathbf{1}[\geq 1\text{child}]_i$	-	-	0.445***	0.455***	0.458***	0.503**
			(0.112)	(0.117)	(0.118)	(0.135)
Personal controls	No	No	No	Yes	Yes	Yes
Household income	No	No	No	No	Yes	Yes
Work-related controls	No	No	No	No	No	Yes
N.Obs.	1708	1708	1708	1708	1708	1708

NOTES: The sample refers to married and native employees aged 25-44. Reported are odds ratios with robust standard errors in parentheses. Personal characteristics include age, (college) education, and regional dummies (seven categories). Household income is the net average monthly household income (four categories: <1200 euros, 1201-2000 euros, 2001-3000 euros, and >3000 euros). Work-related characteristics include a binary indicator for full-time employment, the National Classification of Occupations (CNO) one-digit occupation dummies (regrouped, five categories), National Classification of Economic Activities (CNAE) one-digit industry dummies (regrouped, nine categories), a binary indicator for having a second job, a binary indicator for having flexible working hours, and a binary indicator for having a temporary contract. All models include a constant term. * $p<0.10$, ** $p<0.05$, *** $p<0.01$. SOURCE: Spanish Time Use Survey 2009-2010.

Long Working Hours We next turn to long working hours as a second dimension of job inflexibility. As explained above, we classify sectors as long-working-hours sectors if the share of men working more than 50 hours per week is above the median across all sectors. We use the Continuous Sample of Working Lives (MCVL), which enables us

[4] An odds ratio (OR) below 1 indicates lower odds relative to the reference category. The percentage change is calculated as $(OR - 1) \times 100$.

to conduct a dynamic analysis of the relationship among job inflexibility, motherhood, fertility, and wages.

We begin by estimating how motherhood affects the probability of working in a long-working-hours sector. Specifically, we estimate the following regression:

$$\text{lwh}_{s(it)} = \beta \text{Female}_i \times \mathbf{1}[\geq 1\text{child}]_{it} + \mu_i + \mu_t + \mu_{n(it)} + \alpha X_{it} + \epsilon_{it}, \tag{7}$$

where $\text{lwh}_{s(it)}$ is a dummy variable equal to 1 if an individual is employed in a long-working-hours sector and 0 otherwise. The key explanatory variable, $\text{Female}_i \times \mathbf{1}[\geq 1\text{child}]_{it}$, is the interaction between being a woman, Female_i, and being a mother, that is, having at least one child, $\mathbf{1}[\geq 1\text{child}]_{it}$, in the same quarter. The regression includes individual fixed effects, μ_i, time fixed effects, μ_t, dummies for the number of children in the household, $\mu_{n(it)}$ (six categories: 0 children, 1 child, 2, 3, 4, and 5 or more children), and additional controls, X_{it}.

Table 5 reports the OLS estimates of Equation (7). The results show that motherhood is associated with a lower probability of working in a long-working-hours sector. This effect is economically meaningful and becomes larger with the number of children: mothers with one child are significantly less likely to work in such sectors, and the effect is even stronger for mothers with two or more children. This pattern is consistent with the view that long-hour jobs are especially difficult to reconcile with childcare responsibilities.

We next study how employment in a long-working-hours sector affects future fertility and female wage growth. We begin by examining the likelihood of having a child among women employed in regular versus long-working-hours industries. Table 6 reports estimates of the following regression model:

$$\text{nb}_{it+4} = \beta \, \text{lwh}_{s(it)} \times \mathbb{1}[\geq 1\text{child}]_{it} + \mu_i + \mu_t + \mu_{s(it)} + \mu_{n(it)} + \alpha X_{it} + \varepsilon_{it}, \tag{8}$$

where the dependent variable, nb_{it+4}, is a dummy equal to 1 if a newborn is recorded in the household four quarters ahead relative to the quarter of reference, and 0 otherwise. The main explanatory variable, $\text{lwh}_{s(it)} \times \mathbf{1}[\geq 1\text{child}]_{it}$, is the interaction between being employed in a long-working-hours sector s in quarter t, $\text{lwh}_{s(it)}$, and being a mother, that is, having at least one child, $\mathbf{1}[\geq 1\text{child}]_{it}$, in the same quarter. The regressions also include worker fixed effects, μ_i, time fixed effects, μ_t, sector fixed effects, $\mu_{s(it)}$, dummies for the number of children in the household, $\mu_{n(it)}$ (six categories: 0 children, 1 child, 2, 3, 4, and 5 or more children), and other controls, X_{it}.

Table 6 reports the estimates of Equation (8). Column (1) includes only the indi-

Table 5: Motherhood and Employment in Long Working Hours Sectors

	(1)	(2)	(3)
$\text{Female}_i \times \mathbf{1}[\geq \text{1child}]_{it}$	-0.0061***	-0.0070***	
	(0.0008)	(0.0008)	
$\text{Female}_i \times \mathbf{1}[= \text{1child}]_{it}$			-0.0065***
			(0.0008)
$\text{Female}_i \times \mathbf{1}[\geq \text{2children}]_{it}$			-0.0092***
			(0.0011)
Individual FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Number of children FE	Yes	Yes	Yes
Controls	No	Yes	Yes
N.Obs.	4260913	4260913	4260913
Adjusted R-squared	0.9194	0.9209	0.9209

NOTES: The sample refers to native men and women, aged 25-44 years old, employed in the quarter of reference. The outcome variable is a dummy variable that takes the value 1 if an individual is employed in a long-working-hours sector, 0 otherwise. The independent variable is a gender (female) dummy interacted with a dummy for the number of children in the household. Standard errors are robust. Controls include dummies for age, labor market experience, job tenure, occupational skill groups, and having a spouse in the household. *** p<0.01, ** p<0.05, * p<0.1. SOURCE: MCVL 2011-2015.

cator for employment in a long-working-hours sector, while Columns (2) and (3) also include its interaction with an indicator for being a mother. Columns (4) and (5) additionally control for sector fixed effects. Women employed in long-working-hours sectors are less likely to have a newborn by about 0.8 percentage points relative to those employed in flexible jobs (Column (1)). This effect is sizable, amounting to about 20% of the average probability of having a newborn among women aged 25 to 44 in the sample period. The effect is particularly strong for women who already have at least one child in the household (Column (2)), and it remains robust after the inclusion of worker-level controls and sector fixed effects (Columns (3)–(5)).

We conclude by studying the wage growth of women in regular and long-working-hours sectors (Bover et al., 2025). Table 7 reports estimates of the following regression model:

$$\Delta \log w_{it} = \beta \, \text{lwh}_{s(it)} \times \mathbb{1}[\geq \text{1child}]_{it} + \mu_i + \mu_t + \mu_{s(it)} + \mu_{n(it)} + \alpha X_{it} + \epsilon_{it}. \quad (9)$$

Equation (9) relates quarterly log changes in daily wages, $\Delta \log w_{it}$, to job flexibility, focusing on the interaction between being a mother, i.e., having at least one child, $\mathbb{1}[\geq \text{1child}]_{it}$, and working in a long-working-hours sector s in quarter t, $\text{lwh}_{s(it)}$. Fixed effects and controls are the same as those included in Equation (8).

The results reveal that mothers employed in long-working-hours sectors experi-

Table 6: Long Working Hours Sectors and Future Fertility

	Probability of having an extra child				
	(1)	(2)	(3)	(4)	(5)
$\text{lwh}_{s(it)}$	-0.0083***	-0.0022	-0.0046**		
	(0.002)	(0.002)	(0.002)		
$\text{lwh}_{s(it)} \times \mathbf{1}[\geq \text{1child}]_{it}$		-0.0179***	-0.0166***	-0.0174***	
		(0.004)	(0.004)	(0.004)	
$\text{lwh}_{s(it)} \times \mathbf{1}[= \text{1child}]_{it}$					-0.0164***
					(0.004)
$\text{lwh}_{s(it)} \times \mathbf{1}[\geq \text{2children}]_{it}$					-0.0215***
					(0.006)
Individual FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Number of children FE	Yes	Yes	Yes	Yes	Yes
Sector FE	No	No	No	Yes	Yes
Controls	No	No	Yes	Yes	Yes
N.Obs.	1421045	1421045	1421043	1421043	1421043
Adjusted R-squared	0.53	0.53	0.54	0.54	0.54

NOTES: The sample refers to native women, aged 25-44 years old, employed in the quarter of reference. The outcome variable is a dummy that takes the value 1 if a newborn is observed in a household 4 quarters after the quarter of reference, and 0 otherwise. The independent variables are a dummy that takes the value 1 if a worker is employed in a non-flexible job in the initial quarter, 0 otherwise, and their interaction with a dummy for the number of children in the household. Standard errors are robust. Controls include dummies for age, labor market experience, job tenure, occupational skill groups, and having a spouse in the household. *** p<0.01, ** p<0.05, * p<0.1. SOURCE: MCVL 2011-2015.

ence significantly slower wage growth than those in more flexible jobs. The wage growth penalty is substantial and amounts to -0.0035 (Column (2)), a magnitude comparable to the average quarterly wage growth of employed women during the sample period. These patterns underscore that rigid work structures can impede women's human capital accumulation and wage trajectories after childbirth. Flexibility, by contrast, allows for continued earnings progression, likely by better accommodating caregiving needs and preserving attachment to higher-productivity tasks. The Spanish evidence fits into a broader literature on the value and cost of flexibility, which we turn to next.

2.4 Evidence on the Value and Costs of Flexibility: A Brief Review

Beyond the evidence we present for Spain, a large empirical literature documents that workers are willing to trade earnings for flexibility. This literature highlights three related points: workers value flexibility, flexibility is often constrained in practice, and obtaining it may come at the cost of lower wage growth or slower career progression. In particular, flexibility—whether in hours, schedules, or location—is a valued job amenity, especially for women and mothers. At the same time, jobs offering such

Table 7: Wage Growth Penalty in Long-Working-Hours Sectors

	Quarterly growth of daily wage				
	(1)	(2)	(3)	(4)	(5)
$\text{lwh}_{s(it)}$	-0.0017	-0.0004	0.0023		
	(0.002)	(0.002)	(0.002)		
$\text{lwh}_{s(it)} \times \mathbf{1}[\geq \text{1child}]_{it}$		-0.0035**	-0.0035**	-0.0032**	
		(0.002)	(0.002)	(0.002)	
$\text{lwh}_{s(it)} \times \mathbf{1}[= \text{1child}]_{it}$					-0.0022
					(0.002)
$\text{lwh}_{s(it)} \times \mathbf{1}[\geq \text{2children}]_{it}$					-0.0073***
					(0.002)
Individual FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Number of children FE	Yes	Yes	Yes	Yes	Yes
Sector FE	No	No	No	Yes	Yes
Controls	No	No	Yes	Yes	Yes
N.Obs.	1845569	1845569	1845568	1845567	1845567
Adjusted R-squared	0.06	0.06	0.06	0.06	0.06

NOTES: The sample refers to native women, aged 25-44 years old, employed in the quarter of reference. The outcome variable is the daily wage growth rate between two consecutive quarters. The independent variable is a dummy variable that takes the value 1 if a worker is employed in a non-flexible job in the initial quarter and 0 otherwise, interacted with a dummy variable for the number of children in the household. Standard errors are robust. Controls include dummies for age, labor market experience, tenure on the job, occupational skill groups, and having a spouse in the household. *** p<0.01, ** p<0.05, * p<0.1. SOURCE: MCVL 2011-2015.

flexibility may involve lower wage growth or more limited career progression. More recent evidence emphasizes that workers' ability to adjust hours is often constrained in practice. Using administrative data from Washington State, Lachowska et al. (2025) document a substantial mismatch between workers' preferred and actual hours, and show that these discrepancies reflect equilibrium work-hour constraints arising from firm-side considerations rather than unconstrained worker choice, with quantitatively meaningful welfare costs.

In a large-scale field experiment, Mas and Pallais (2017) find that workers are willing to accept up to an 8% lower wage for flexible start times or remote work, with higher willingness among women, particularly among mothers. These patterns are consistent with the model in Section 2.1, where inflexibility raises the time cost of children, and with the empirical evidence in Section 2.2 linking rigid schedules to lower female participation. Complementing this, Wiswall and Zafar (2018) use survey experiments with university students to show that women prefer flexibility and shorter hours, while men place more value on earnings growth. Such ex ante differences in preferences can reinforce occupational sorting, as documented in Section 2.

One important dimension of flexibility is spatial, as captured by commuting time. Using French administrative data, Le Barbanchon et al. (2021) show that women apply

to jobs closer to home than men, accepting lower wages in exchange for shorter commutes, and that these preferences persist after re-employment, explaining part of the gender wage gap. In the UK, Petrongolo and Ronchi (2020) find that women's shorter commutes, especially during child-rearing years, reflect a stronger willingness to trade wages for proximity, narrowing their feasible job set and contributing to wage disparities. For the US, Black et al. (2014) document that cities with longer commutes have lower labor force participation rates among married women. In more recent work, Farré et al. (2023) exploit the shape of US cities, that is, how closely a city resembles a circle, as an exogenous source of variation. They find that a 10-minute increase in commuting time decreases the probability that married women participate in the labor market by 4.4 percentage points.

Willingness to adopt flexible work arrangements comes at a cost. A central insight from the literature is that persistent gender earnings gaps, especially among highly educated workers, are closely tied to how firms structure pay and hours. In her seminal contribution, Goldin (2014) shows that many high-paying occupations feature convex earnings schedules, whereby long and non-flexible hours are disproportionately rewarded. As a result, jobs in sectors such as law or business penalize workers who require flexibility, often women after childbirth, while occupations with more linear pay structures, such as pharmacy or technology, exhibit much smaller gaps (Goldin and Katz (2016)). Consistent with this mechanism, Cortés and Pan (2019) provide evidence that constraints on supplying long hours, arising, for example, from limited access to substitutes for household production, play a key role in shaping gender differences in earnings. Relatedly, Farré et al. (2011) show that Spain's immigration wave expanded the supply of household services and increased the labor supply of highly educated women with caregiving responsibilities.

Recent work highlights that new forms of flexibility can partly offset these constraints. Harrington and Kahn (2025) show that the expansion of work-from-home opportunities reduces the motherhood employment gap, particularly in occupations with high returns to long hours and limited schedule flexibility, suggesting that flexibility over location can substitute for flexibility over timing. Relatedly, Bratsberg and Walther (2025) show that increases in work flexibility can also affect fertility directly: using the first Covid-19 lockdown in Norway as a shock to flexibility, they find a sizeable increase in births, concentrated among higher-earning women in previously inflexible jobs.

More generally, this literature emphasizes that temporal flexibility is central to understanding persistent gender gaps in career progression. In many high-paying occupations, pay rises convexly with hours and timing, disadvantaging those who

need flexibility, who are disproportionately women. Early in their careers, Gicheva (2013) shows that among highly educated workers, extra-long hours yield faster wage growth (about 1% annually for five additional hours beyond roughly 47 per week), helping to explain why gaps widen when women cannot supply those hours. In medicine, Wasserman (2022) provides causal evidence that reducing time demands matters: after resident hours were capped at 80 per week, more women entered the affected specialties, with little change for men, implying that time demands deter female entry and that relaxing them can narrow gaps within a profession.

However, inflexibility is not only about long working hours. Complementing the firm-level perspective, a number of studies examine how workers adjust across jobs in response to family constraints. Hotz et al. (2018) examine how workplace characteristics interact with the earnings trajectories of new parents in Sweden. Using matched employer-employee data, they estimate workers' preferences for job attributes before childbirth and construct a "family-friendliness" index based on mothers' pre-birth choices. They find that mothers who move to more family-friendly workplaces after childbirth increase their contracted hours and annual earnings compared with those who stay put, helping narrow the income gap with fathers. However, these gains come at the cost of slower wage growth and reduced occupational skill content, suggesting that the jobs that enable work-family compatibility often offer fewer opportunities for career advancement. Additionally, several studies examine the role of coordination in work schedules. Cubas et al. (2023) measure how synchronized work hours are across occupations and find that higher coordination commands a wage premium but also widens the gender gap. Women, especially mothers, are penalized for missing peak hours, and their model suggests that lowering coordination needs could halve the within-occupation gap. On workplace design, Ciasulla and Uccioli (2023) show, using evidence from the Australian Fair Work Act, that mothers often request predictable schedules; greater regularity reduces the average child penalty in hours from about 47% to 40%, and by nearly 30% for the most affected. Relatedly, in France, aligning school and work schedules by adding Wednesday classes nudged mothers into regular Monday-Friday full-time work and reduced the parental pay gap by roughly 6%, with no parallel effect for fathers (Duchini and Van Effenterre (2024)).

The trade-off between flexibility, wages, and career progression has also been studied in structural quantitative models. Erosa et al. (2022) quantify how nonmarket responsibilities, convex returns to hours, and household comparative advantage jointly generate both occupational sorting and sizable within-occupation wage gaps. In their model, exogenously given higher home-production responsibilities for women make them more likely to choose occupations with less-convex returns to hours. But the

flexibility provided by less convex jobs endogenously results in a gender wage gap. Yanagimoto (2024) extends the framework in Erosa et al. (2022) to allow for social norms that penalize women who earn more than their husbands. With such norms, women endogenously choose to spend more hours at home and, if they work, opt for less-convex jobs that allow them to work fewer hours. Adda et al. (2017) build on related ideas by developing a dynamic structural model of German women's labor supply, occupational mobility, wage growth, and fertility timing, allowing for skill depreciation during career breaks. They show that the long-run career costs of children operate mainly through lost experience and the shift into child-friendlier but slower-growth occupations. Moderate parental leave helps preserve job matches and mitigates losses, whereas very long leave amplifies depreciation. This framework highlights how fertility decisions and occupational dynamics interact over the life cycle, with important implications for the optimal design of leave policies.

Several recent studies have adapted these tools to specific institutional contexts. Guner et al. (2024) build a life-cycle model for married women that incorporates Spain's dual labor market (temporary versus permanent contracts) and the prevalence of split-shift schedules with long midday breaks, both of which raise the time cost of work and reduce job security early in careers. Calibrated to Spanish data, the model shows that eliminating duality and split shifts, along with expanding childcare, would boost maternal participation, reduce employment gaps, and increase fertility toward 1.8 children per married woman.

3 The Role of Firms

Section 2 showed that job inflexibility can reduce female labor force participation and fertility by increasing the time cost of children. However, these outcomes are not determined solely by workers' choices. Firms also respond to workers' caregiving behavior and to the policies that shape it. When mothers are more likely to reduce hours, take leave, or demand flexibility, and when these adjustments are costly for firms, employers may alter hiring, promotion, and wage-setting decisions in anticipation. In such circumstances, these responses can amplify gender gaps in the labor market and give rise to statistical discrimination (Phelps, 1972).

This section brings firms explicitly into the analysis. We first present a simple theoretical model in which flexibility affects both sides of the market: it lowers the cost of combining work and motherhood for women, but it also reduces the productivity loss that firms incur when workers have children. The model illustrates how firm flexibility can shape both fertility and employment. We then review a growing quantitative

literature that embeds these mechanisms in richer equilibrium settings with search frictions, endogenous wage setting, and policy interventions. Taken together, these models show that labor market outcomes and fertility depend not only on workers' preferences and household decisions but also on how firms respond to these factors.

3.1 A Simple Model with Firms

The simple model in Section 2.1 showed how job inflexibility reduces female labor force participation and fertility by increasing the time cost of children. That framework was useful for organizing the empirical evidence in Section 2, but it abstracted from firms' decisions.

In this section, we extend that logic by bringing firms explicitly into the analysis. The key new idea is that flexibility has two-sided effects. It shapes women's valuation of jobs by easing the combination of work and motherhood, and it affects firms because workers' childbearing influences productivity and hiring costs. This allows us to study how firm flexibility shapes both fertility and employment.

The model is static and populated by women and firms. Women differ in their ability, $a \geq 0$, drawn *before* entering the labor market from a continuous distribution F, and in the utility they receive from having a child $u \geq 0$, assumed to be a random variable drawn from a uniform $U[0, \beta]$ and observed *after* entering the labor market.

Firms are characterized by a parameter $T \in [0, 1]$ that governs the degree of job inflexibility. A lower T means the firm can better accommodate an employee who has children. In this sense, T plays a role analogous to the one in Section 2.1, but here, inflexibility affects both sides of the market: it increases the worker's cost of combining work and motherhood and also raises the firm's productivity loss when an employee has a child.

The timing of the actions is as follows. Nature draws women's ability a and the firm's type T. Then women and firms meet at random in the market and decide whether to form a match. A match is formed if both women and firms have positive expected surplus.

The value of being active for a firm is equal to its profits:

$$\Pi \;=\; a\Big[1 - T\,\varphi\,\mathbb{1}[\text{child}]\Big] \;-\; w, \tag{10}$$

where w is the (exogenous) wage rate and $\varphi \in (0, 1)$ is the productivity loss from an employee having a child, amplified by firm inflexibility T. Thus, if the worker has a child, profits fall by a smaller amount in more flexible firms.

The value of being employed for a woman is equal to:

$$W \;=\; w + \big[u - T\,\delta\big]\,\mathbb{1}[\text{child}], \tag{11}$$

where $\delta > 0$ is the personal cost of combining work and motherhood, enhanced by T. If no match is formed, the firm receives a payoff of 0, while the woman derives utility from having a child; the value of being unemployed equals $U = u$.

The model is solved backward. We first characterize the fertility decision of an employed woman, and then study how firms and women evaluate the match ex ante.

Fertility decision. Upon observing u, a woman employed at a firm with inflexibility T chooses to have a child if:

$$u \;\geq\; T\,\delta \;\equiv\; \hat{u}(T).$$

The threshold $\hat{u}(T)$ is the minimum utility from children required for motherhood to be optimal while employed. A higher level of firm flexibility (lower T) lowers this threshold by reducing the cost of combining work and motherhood.

Since $u \sim U[0, \beta]$, the ex-ante probability of childbearing depends on where the threshold $\hat{u}(T)$ falls relative to the support $[0, \beta]$. When β is large enough, the probability of having a child, $p(T)$, lies in the interior of the support and is equal to

$$p(T) \;= \frac{\beta - \hat{u}(T)}{\beta}. \tag{12}$$

It is easy to see that $p(T)$ is *decreasing* in T; that is,

$$\frac{\partial p(T)}{\partial T} = -\frac{1}{\beta}\frac{\partial \hat{u}(T)}{\partial T} = -\frac{\delta}{\beta} < 0 \tag{13}$$

This leads to the first proposition.

Proposition 3. *When β is large enough, the fertility of employed women is strictly increasing in a firm's flexibility.*

The intuition is immediate. More flexible firms reduce the cost of having children while employed, making motherhood attractive for a larger set of women. Relative to Section 2.1, the logic is similar: flexibility lowers the effective cost of children. The difference is that here flexibility is a firm characteristic and therefore also matters for firms' decisions.

Hiring decision. At the time of hiring, u has not yet been realized. Firms take expectations over their profits:

$$\mathbb{E}[\Pi] \;=\; a\Big[1-\Psi(T)\Big] \;-\; w \tag{14}$$

where $\Psi(T)$ is the firm's expected productivity loss incurred, given by

$$\Psi(T) = p(T)T\varphi. \tag{15}$$

The firm decides to hire if $E[\Pi] \geq 0$, or equivalently, if

$$a \geq \frac{w}{1-\Psi(T)} = \hat{a}(T) \tag{16}$$

The expected productivity loss $\Psi(T)$ depends on two forces: more flexible firms suffer a smaller productivity loss when a worker has a child, and, at the same time, women in more flexible firms are more likely to have children. The first effect reduces firm costs directly, while the second tends to increase expected costs. Under the maintained assumption that β is large enough, the increase in fertility associated with greater flexibility is not too strong, so the direct reduction in productivity losses dominates the rise in expected childbearing. More specifically, when β is large enough,

$$\frac{\partial \Psi(T)}{\partial T} = \frac{\partial p(T)}{\partial T}T\varphi - p(T)\varphi = -\frac{\delta}{\beta}T\varphi + \frac{\beta - T\delta}{\beta}\varphi = \frac{\varphi}{\beta}[-2\delta T + \beta] > 0$$

That is, the expected loss incurred by firms is increasing in firm inflexibility T, which makes the hiring threshold $\hat{a}(T)$ increase in T as well. Less flexible firms are therefore less willing to hire a broader set of women because the expected productivity costs associated with childbearing are higher.

Employment decision. Women compute the expected surplus of being employed, equal to:

$$\mathbb{E}[W] - \mathbb{E}[U] = w + \mathbb{E}[\max\{u - T\delta, 0\}] - \mathbb{E}[u] \tag{17}$$

and decide to form a match if $\mathbb{E}[W] - \mathbb{E}[U] \geq 0$, or equivalently, if

$$w \geq T\delta\left[1 - \frac{T\delta}{2\beta}\right] = \Omega(T) \tag{18}$$

Notice that, when β is large enough,

$$\frac{\partial \Omega(T)}{\partial T} = \delta \left[1 - \frac{T\delta}{\beta} \right] > 0.$$

That is, the expected opportunity cost of having children when employed is increasing in firm inflexibility T. Hence, women are less willing to accept employment in less flexible firms.

Match Formation. Finally, a match between firm T and woman a is formed if the two following conditions hold simultaneously:

$$\begin{aligned} a &\geq \hat{a}(T) \quad \textit{:hiring condition;} \\ T &\leq \bar{T} \quad \textit{:participation condition;} \end{aligned}$$

where $\bar{T}$ is a participation threshold for women, i.e., the value of inflexibility for which $\mathbb{E}[W] = \mathbb{E}[U]$, while $\hat{a}(T)$ is defined in equation (16).[5]

Because the woman's participation condition depends only on the firm's flexibility, the employment rate at a firm T, $H(T)$, can be written as

$$H(T) = \begin{cases} 0 & \text{if} \quad T > \bar{T}; \\ 1 - F(\hat{a}(T)) & \text{if} \quad T \leq \bar{T}. \end{cases}$$

Flexibility affects employment through two distinct margins:

1. *Extensive margin:* Firms above $\bar{T}$ cannot hire women. Reducing inflexibility below $\underline{T}$ makes women participate.

2. *Intensive margin:* For firms below $\bar{T}$, increasing flexibility lowers the hiring thresholds, admitting lower-ability women into employment.

Both margins operate in the same direction: flexibility promotes women's employment. Firms are more willing to hire because expected productivity losses are smaller, and women are more willing to accept employment because the cost of combining work and motherhood is lower. This leads to our next proposition.

Proposition 4. *When β is large enough, the employment rate (weakly) decreases with firm inflexibility.*

[5]Since $\Omega(T)$ is continuous and strictly increasing in T, there exists a unique $\bar{T} \in (0,1)$ as long as w is low enough, i.e., $w \leq \delta[1 - \delta/(2\beta)]$. When $w > \delta[1 - \delta/(2\beta)]$, the women's participation constraint never binds, and all women are willing to work at any firm type. In what follows, we focus on the first case.

Propositions 3 and 4 summarize the main message of the model. As in Section 2.1, flexibility raises fertility by lowering the cost of children. But once firms are explicitly introduced, flexibility also raises employment by reducing firms' expected losses and making matches more valuable to both sides of the market. This is the key mechanism that underlies the richer quantitative models discussed next.

3.2 Quantitative Equilibrium Models: A Brief Review

The toy model in Section 3.1 illustrates a simple yet central mechanism: firm flexibility affects both fertility and employment by changing the costs faced by workers and firms. A growing quantitative literature embeds this mechanism in richer equilibrium environments with search frictions, endogenous wage setting, labor market dynamics, and policy interventions. More broadly, this work connects to a recent literature on non-wage amenities, which emphasizes that scheduling practices, family leave, and telecommuting are central job attributes and that their valuation is best understood in settings with imperfect competition and worker–firm sorting (Mas, 2025). In an early and important contribution, Flabbi and Moro (2012) embed the idea of flexible and non-flexible jobs within a general equilibrium search-and-matching model. In their framework, flexibility is modeled as an amenity, the ability to work fewer hours, which workers value but which is costly for firms to provide beyond the direct cost of reduced hours. In equilibrium, flexible jobs tend to pay less but attract more women who value flexibility, thereby generating a gender pay gap.

More recent work studies these mechanisms in environments where firms set wages and amenities and may statistically discriminate. Using linked employer-employee data from Brazil, Morchio and Moser (2024) document a large gender pay gap, with women working at lower-paying employers while enjoying better non-pay attributes. They use an equilibrium search model with endogenous firm pay, amenities, and hiring to show quantitatively that compensating differentials account for about half of the gender pay gap and that eliminating gender differences would generate sizable output and welfare gains. A similar approach, but focused on Finland, is followed in Xiao (2024). She explores the role of workers' skill accumulation, amenity preferences, and employers' statistical discrimination in wage setting and job allocation in a model in which workers and employers make decisions on both the wage margin and the employment margin. According to her quantitative analysis, statistical discrimination accounts for 44% of the gender wage gap in early career, whereas gender differences in labor force attachment explain most of the wage gap in late career.

These papers are primarily designed to study wages, amenities, and sorting, so

fertility is taken as exogenous, and their implications for fertility itself cannot be assessed directly. This is precisely where the next generation of models becomes especially relevant. Bover et al. (2025) allow for decisions about both the timing and number of children within a search-and-matching model with dual contracts, flexible and non-flexible jobs, and firm decisions over hiring, promotion, and firing. Mothers in non-flexible jobs accumulate human capital more slowly, and workweek reductions come with dismissal protection. Estimating the model on Spanish administrative data, they show that once firms adjust optimally, the effects of family-friendly policies on fertility, employment, and lifetime earnings can differ substantially from their partial-equilibrium effects. Finally, Almar et al. (2025) offer a different perspective by developing a joint equilibrium of marriage and labor markets in which families choose fertility and labor supply, while firms decide on managerial training and promotions under incomplete information about workers' family commitments. Spousal ambition influences observed labor supply, shaping firms' promotion decisions via statistical inference. Policies such as gender-equal parental leave can narrow promotion gaps but may also lead to skill depreciation, while managerial quotas for women enhance firms' training of women, shift marital sorting toward more career-oriented matches, and increase aggregate welfare.

Taken together, these models highlight that fertility and career outcomes stem from the interplay of household decisions, labor market frictions, and firm behavior. More importantly, they show that the design of family-friendly policies must account for how both workers and firms adjust in equilibrium, as ignoring firm responses can reverse welfare rankings and obscure the true trade-offs between fertility and gender equality. We discuss these issues in more detail in the following section.

4 Family-Friendly Policies

Regulations governing work schedules and other family-friendly policies are designed to help workers reconcile caregiving responsibilities with employment. However, flexibility is not costless to provide, as the simple model and the equilibrium literature in Section 3 make clear. When such policies expand workers' rights to reduce hours or take leave, they may impose adjustment costs on firms that must reorganize production, reallocate tasks, or hire temporary replacements.

These costs can trigger endogenous responses by firms. Firms may adjust hiring, promotion, and wage-setting decisions, and, anticipating workers' behavior, may statistically discriminate against groups more likely to use these policies. As a result, the effects of family-friendly policies on labor market outcomes and fertility need not be

unambiguously positive, even when they improve workers' ability to balance work and family.

This section reviews the growing evidence on these firm responses and their implications. We first examine the direct costs of family-friendly policies and how firms adjust to them (Section 4.1). We then show that these costs and adjustments vary systematically across firms, with larger firms generally better able to accommodate flexibility (Section 4.2). Finally, we discuss how these firm responses can generate unintended consequences and why evaluating such policies requires an equilibrium perspective (Section 4.3).

4.1 The Cost for Firms: Evidence

A growing firm-level literature shows that the costs of family-friendly policies are often real but, on average, not overwhelming. The main reason is that firms typically adjust along several margins to cope with worker absences: they reallocate tasks across coworkers, hire temporary replacements, or reorganize production internally. At the same time, the way firms absorb these costs matters for workers' careers and may generate broader consequences for hiring and promotion.

Evidence from several countries points to this general pattern. An early quasi-experimental study is Gallen (2019), who examines a parental leave extension in Denmark and finds negative effects on firm survival concentrated among smaller firms. This result highlights that average firm-level effects may mask substantial heterogeneity by firm size. In Denmark, Brenøe et al. (2024) follow small firms around female employees' childbirths and find that most firms accommodate parental leave by increasing coworkers' hours, hiring temporary staff, and raising the wage bill, with public reimbursements mitigating part of the financial burden. Only smaller and younger firms appear to face more substantial strain. In Sweden, Ginja et al. (2023) exploit an unexpected extension of parental leave in 1989 and show that each additional long-leave case increases coworkers' hours and temporary hiring enough to raise the wage bill by the equivalent of ten full-time months, with the largest adjustments occurring when no clear internal substitute is available. Similarly, using administrative data from Brazil, Schmutte and Skira (2025) show that firms respond immediately to maternity leave spells by increasing hiring, although replacement is far from one-for-one, indicating that employers also rely on other adjustment margins. Relatedly, Corekcioglu et al. (2025) study firms' responses to parental-leave-induced worker absence in Norway. They show that more exposed firms adjust by hiring more young women, increasing turnover, and expanding part-time female employment, while investment

and wage-bill outcomes also change, with little effect on profits.

These findings suggest that the immediate costs of leave are closely tied to firms' ability to substitute absent workers. But even when firms can cope in the short run, an important question is whether longer leave affects mothers' longer-run career progression. For Norway, Corekcioglu et al. (2024) study a series of paid parental-leave expansions and find little evidence that longer leave affected mothers' chances of reaching top-paying jobs or executive positions within firms, either in the short or the long run. In a related vein, Hotz et al. (2018) show, using Swedish data, that what characterizes more family-friendly workplaces is not simply greater schedule flexibility, but greater substitutability across workers. This facilitates coverage during parental absences, but may also reduce opportunities for skill accumulation and promotion if jobs are redesigned around interchangeability rather than career progression.

A further issue is that firms may respond not only to realized absences but also to the expectation of future absences. This is where family-friendly policies can generate unintended consequences. For Germany, Huebener et al. (2025) show that firms bridge parental leave absences through internal reallocation and temporary hiring, but also become more reluctant to hire women of childbearing age, pointing to adverse long-run implications for gender equality in hiring. Similarly, Carta et al. (2024) find that a change in unemployment insurance rules in Italy, which increased quit rates among mothers after childbirth, led firms to hire young women more often on temporary contracts as a precaution.

Taken together, this evidence suggests a common theme. Family-friendly policies need not impose high average costs on firms, because firms often adjust successfully through substitution and reorganization. However, the same adjustments can affect promotion, wage growth, and hiring decisions, and may therefore generate persistent gender gaps even when the short-run disruption to production is limited. A related perspective is offered by Corradini et al. (2025), who study a union-driven expansion of female-friendly amenities in Brazil, including maternity leave extensions, flexible schedules, and childcare provisions. They show that these changes increased women's retention and job queues without reducing wages, employment, or firm profits, suggesting that improving workplace quality for women need not always involve large trade-offs. The ability of firms to substitute workers is thus central and likely depends on firm size and the characteristics of the local labor market in which firms operate. We return to this point in the next section.

4.2 The Importance of Firm Size

Firm size is likely to shape how costly it is for firms to accommodate workers with caregiving responsibilities. In larger firms, the degree of substitutability among workers may be higher, making it easier to reorganize tasks internally when employees reduce hours or take leave. Several papers emphasize the importance of substitutability within the firm; see, among others, Goldin and Katz (2016), Azmat et al. (2024), Brenøe et al. (2024), Huebener et al. (2025), and Hensvik and Rosenqvist (2019). Hensvik and Rosenqvist (2019), for example, show that the costs of worker absences depend critically on how easily coworkers can substitute for one another, with more substitutable work environments better able to accommodate temporary reductions in labor supply. Consequently, firms may react differently to regulations regarding flexibility depending on their size.

To further explore this issue, we focus again on Spain, where several reforms in recent years have been introduced to achieve a better balance between family and work. First, in 1999, a law granted parents of children under six the right to reduce working hours by up to half with strong dismissal protection. Second, in Spain, parental leave duration has gradually increased since the early 2000s, becoming equal to the 16 weeks of maternal leave for the first time on 1 January 2021. For the analysis, we use the Spanish Salary Structure Survey. Table 8 reports three relevant margins of adjustment by establishment size: the share of workers on reduced hours, the share on parental leave, and the share on temporary disability leave.

Panel A of Table 8 highlights a striking gender asymmetry in the incidence of reduced-hours arrangements across firm sizes. For establishments with fewer than 4 employees, only 0.2% of men report working reduced hours, compared to 2.0% of women. This gap widens sharply in larger firms: in firms with 200 or more workers, 5.4% of women work reduced hours compared to just 0.7% of men. The gap is even larger in firms with 500 or more workers, at 9.4% versus 1.2%. Thus, the gradient with respect to firm size is nearly flat for men, whereas it rises steeply for women. This pattern is consistent with the view that large firms are better able to accommodate hour reductions for female employees, whether because they have greater internal flexibility, more developed human-resources practices, or a higher degree of worker substitutability. At the same time, it may also reflect self-selection, if women who anticipate a stronger need for flexibility sort disproportionately into larger employers. Regardless of the precise mechanism, the evidence suggests that firm size is strongly associated with gender differences in access to reduced-hours arrangements.

Panel B turns to parental leave. Here too, take-up rises with establishment size for both men and women. Among men, the share on parental leave more than dou-

bles when we move from firms with fewer than 4 employees to firms with 500 or more employees, from 3.8% to 9.0%. For women, the corresponding increase is also sizable, from 3.0% to 5.5%. The male share exceeds the female share across much of the firm-size distribution, likely reflecting differences in employment selection, as mothers of very young children are less likely than fathers to remain employed. Even so, the upward gradient for both men and women suggests that large firms provide more opportunities or perhaps greater incentives for parents to take temporary leave, potentially because they have more formal procedures, better human-resources infrastructure, and greater ability to reallocate work internally when employees are absent.

As complementary evidence, Panel C of Table 8 reports the incidence of temporary disability (medical leave) across establishment size for both men and women. Although this is not a formal family policy, in Spain it may also serve as a margin of adjustment to balance work and caregiving responsibilities. As shown, the incidence of temporary disability increases with establishment size for both men and women, but more steeply for women. Among employees in the smallest firms (1 to 4 employees), disability rates are nearly identical, 16.8% for men and 17.5% for women. However, in the largest firms (500 or more employees), 44.1% of women report temporary disability compared to 33.6% of men. The gender gap, therefore, widens steadily with firm size. This pattern is consistent with the idea that larger firms offer more margins through which workers can adjust labor supply when family demands intensify.[6] Consistent with this interpretation, Angelov et al. (2020), using Swedish administrative data, show that as a result of parenthood, mothers more than double their sick leave compared with fathers. However, they do not find a corresponding effect on health measured by hospital stays.

Taken together, the three panels of Table 8 point to a common pattern: family-related adjustments along the margins of hours reduction, formal leave, and temporary disability are all more prevalent in large establishments, especially for women. This is consistent with the idea that the effective availability of flexibility depends not only on legal rights, but also on firms' organizational capacity to accommodate them. In ongoing work, Guner et al. (2026a) examine how fertility varies across firms and how this variation relates to firm size, flexibility, and workplace organization. They then develop a structural framework in which larger firms can better absorb absences and hours reductions, allowing them to study how firm size shapes both fertility and the incidence of family-friendly policies.

An important question, however, is whether greater access to flexible arrangements

[6]Spain leads Europe in absences from work due to temporary disability, as reported by the Valencian Institute of Economic Research (here).

Table 8: Flexibility and Establishment Size

Establishment Size	Men (%)	Women (%)
	A.Workers on Hours-work Reduction	
1 to 4 workers	0.24	1.99
5 to 9 workers	0.41	2.44
10 to 19 workers	0.12	3.26
20 to 49 workers	0.35	3.28
50 to 99 workers	0.28	4.11
100 to 199 workers	0.38	4.47
200 to 499 workers	0.70	5.38
500 workers or more	1.18	9.44
	B. Workers on Parental Leave	
1 to 4 workers	3.79	3.01
5 to 9 workers	2.79	2.71
10 to 19 workers	3.50	4.64
20 to 49 workers	4.72	4.60
50 to 99 workers	4.46	3.85
100 to 199 workers	6.07	4.73
200 to 499 workers	6.93	5.86
500 workers or more	9.00	5.47
	C.Workers on Temporary Disability	
1 to 4 workers	16.84	17.51
5 to 9 workers	21.08	22.02
10 to 19 workers	23.38	27.57
20 to 49 workers	28.14	30.79
50 to 99 workers	27.12	33.36
100 to 199 workers	29.57	36.91
200 to 499 workers	32.21	38.86
500 workers or more	33.59	44.13

NOTES: The sample refers to private sector employees aged 25-54. Both workers on hours-work reduction and temporary disability refer to events at any time during the year. SOURCE: The 2022 Salary Structure Survey.

in large firms translates into smaller gender pay gaps. The evidence suggests that it does not necessarily do so. To assess potential compensating wage differentials, we also calculate the gender wage gap across establishments of different sizes. Interestingly, the gender wage gap is larger in large firms, increasing from 11% in establishments with 4 or fewer workers to 22% in establishments with 500 or more workers, consistent with evidence from the UK, Jones and Kaya (2023). More broadly, the literature on the gender pay gap provides only limited and mixed evidence on how it varies with firm size. For the UK, Jones and Kaya (2023) show that after accounting for unobserved firm-level heterogeneity, large firms have smaller within-firm raw gen-

der pay gaps and similar adjusted gender pay gaps when compared to smaller firms. Thus, greater scope for flexible arrangements in large firms need not translate into smaller gender wage gaps.

As we argued above, one interpretation of the higher take-up rates of flexible work arrangements in large firms is that it may be easier for large firms to substitute workers. An alternative explanation is informational rather than organizational. Flexible work arrangements may be more frequent in large firms due to peer effects and professional networks. Dahl et al. (2014), Carlsson and Reshid (2022), and Casarico et al. (2025) estimate coworkers' peer effects in paid paternity leave in Norway, Sweden, and Italy, respectively. According to Dahl et al. (2014), the most likely mechanism is information transmission, including increased knowledge of how an employer will react. These mechanisms may also contribute to the stronger firm-size gradients documented in Table 8.

4.3 Unintended Consequences and Equilibrium Responses

Family-friendly policies are often designed to help workers reconcile caregiving and employment. However, when the take-up of such policies is highly gendered, firms may react by adjusting hiring, promotion, and contract decisions in ways that undo part of their intended effects. As a result, the impact of these policies on labor market outcomes and fertility need not be unambiguously positive.

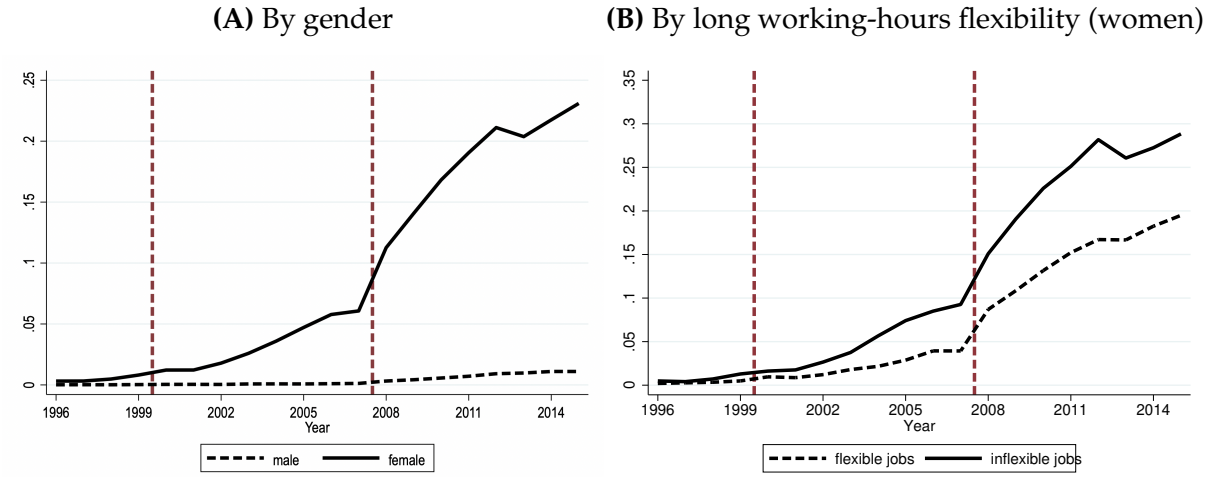
A useful case is Spain's 1999 reform, which granted parents of children under age six the right to reduce working hours by up to half with strong dismissal protection. The age threshold was later extended, first to age eight and then to age twelve. This reform is particularly informative because it combined greater flexibility for parents with potentially significant adjustment costs for firms.

Figure 6 illustrates how the use of reduced working hours evolved after the reform. Panel A shows a stark gender asymmetry: following the introduction of statutory workweek-reduction rights, take-up among women rose sharply, peaking at over 20%, whereas men's take-up remained below 5% throughout. This pattern is consistent with Panel B of Table 1, which shows that more than one in four mothers work part-time, compared with fewer than 3% of fathers. The figure, therefore, makes clear that, although the policy was formally gender neutral, its use was overwhelmingly concentrated among women.

Panel B of Figure 6 shows that, among women, the prevalence of reduced hours is substantially higher in non-flexible industries than in flexible ones. While take-up was already higher in non-flexible sectors before the policy expansions of the 2000s,

the gap widened over time. This suggests that the option to reduce hours is particularly valuable where within-job flexibility is limited. By contrast, flexible sectors combine lower take-up with slower growth in usage, indicating either that part-time arrangements are less necessary or that they are less valuable in those jobs. Taken together, the two panels show that the policy was used disproportionately by women and especially in jobs where flexibility was otherwise scarce. This is precisely the kind of setting in which employer responses may be important, as take-up is concentrated among women and in jobs with limited flexibility, increasing the scope for firms to adjust hiring and promotion decisions.

Figure 6: Workweek Reduction Take-Up



NOTES: The sample refers to native women and men, between 25 and 44, employed in the quarter of reference. The dashed red lines indicate the years the workweek reduction was introduced (1999, for women with children up to age 6) and extended (2007, for women with children up to age 8). SOURCE: MCVL 2011-2015.

Recent empirical work reaches different conclusions about the consequences of this reform. Using Social Security panel data and a difference-in-differences approach, Fernández-Kranz and Rodríguez-Planas (2021) find that the policy's almost exclusively female take-up triggered strong negative employer responses: firms became less likely to hire women of childbearing age, more likely to separate from them, and less likely to offer permanent contracts, with effects spilling over to non-mothers and concentrated in small firms and low-skill sectors.

By contrast, De Quinto and González (2025) exploit variation in eligibility length at the time of the reform in a regression kink design and focus on mothers' own labor market outcomes. They find that longer eligibility modestly increased part-time work during a child's early years, substituting for unemployment rather than replacing full-time work. It also raised earnings on average, with gains persisting into the long run. However, for women with strong labor market attachment before childbirth, i.e., for those on permanent contracts pre-birth, eligibility led to persistently higher part-time

work after the entitlement ended, slightly lowering their earnings. Overall, the policy appears to have strengthened labor market attachment among the average mother, even as it reduced hours and earnings for a subset of more-attached women. Related evidence from China also points to unintended employer responses. Huang and Fan (2025) and Liu et al. (2024) find adverse effects on female employment following the relaxation of the one-child policy and the extension of maternity leave entitlements, respectively.

These reduced-form studies show that employer responses can be important, but they do not, by themselves, reveal the full equilibrium trade-offs among fertility, employment, and wages. This is where quantitative models become essential.

In an early contribution, Erosa et al. (2010) develop a search-and-matching framework in which firms and workers bargain over wages, vacancies respond to labor market tightness, and parental leave policies introduce temporary separations. Mandated leave in this setting raises female welfare and fertility but can reduce male welfare and aggregate efficiency when leaves are long and paid, as they encourage inefficient matches and leave-taking. The bargaining between workers and firms is central to these effects, and the model highlights how even well-intentioned policies can have offsetting general-equilibrium consequences.

More recent work reinforces this point. Morchio and Moser (2024) show that equal-treatment policies fail to achieve welfare gains from eliminating gender differences because of their adverse incentive effects on firms' pay-setting, amenity provision, and hiring decisions. Similarly, in Xiao (2024), a policy that shifts two months of parental leave from women to men closes the wage gap by 13% over the life cycle and reduces the child penalty, as it weakens employers' perceptions of women's expected career interruptions and reduces early-career statistical discrimination. At the same time, an equal-hiring policy for managerial positions improves women's representation, but firms partly undo this policy by increasing wage discrimination, raising the gender wage gap in the first years of the life cycle. Likewise, a policy requiring firms to pay the same wage to otherwise similar men and women reduces the wage gap, but generates unintended consequences through the hiring margin.

These results highlight the importance of studying family-friendly policies in a general-equilibrium setting. In this spirit, Bover et al. (2025) find that many policies that raise fertility, such as longer paid leave, higher firing costs, or child subsidies, also reduce women's lifetime earnings and participation by making them more costly to employ or promote. Exceptions are promotion subsidies, which counteract under-promotion and raise both fertility and earnings. More broadly, their results underscore that policy evaluation must account explicitly for firm responses.

5 Conclusions

This chapter has examined how workplace flexibility affects women's labor market outcomes and fertility decisions, with a particular focus on the Spanish labor market. The evidence shows that job inflexibility raises the time cost of children and shapes how women adjust to caregiving responsibilities. Women are more likely than men to reduce hours when caring for children, often within the same job, and are less likely to be employed in jobs characterized by split-shift schedules and long working hours. These dimensions of inflexibility are associated with lower fertility and slower post-childbirth wage growth for women.

The chapter has also shown that these patterns cannot be understood solely from the worker's side. The simple model in Section 2.1 highlights how inflexible jobs reduce female labor force participation and fertility by increasing the time cost of combining work and children. Section 3 extends this logic by bringing firms explicitly into the analysis. Once firms are taken into account, flexibility affects both sides of the market: it makes motherhood easier to combine with employment, but it also changes firms' expected costs of hiring and retaining workers with caregiving responsibilities. As a result, employment, wages, promotions, and fertility are jointly shaped by worker decisions and firm responses.

The review of family-friendly policies in Section 4 reinforces this broader perspective. Flexibility is highly valued by workers, particularly mothers, and policies that expand access to reduced hours or parental leave can improve work-family balance. However, these policies are not costless for firms. The evidence shows that firms adjust through substitution, temporary hiring, and reorganization, and that these adjustment margins differ systematically by firm size. It also shows that policies intended to support families can generate unintended consequences through hiring, promotion, and wage-setting decisions, especially when take-up is highly gendered. Quantitative equilibrium models make clear that policy effects on fertility and gender inequality can differ substantially once these firm responses are taken into account.

In the Spanish context, the prevalence of split-shift schedules and long working hours appears to be an important obstacle to reconciling work and family life. More broadly, the chapter suggests that improving flexibility requires more than expanding formal rights. The effectiveness of family-friendly policies depends on how flexibility is organized within firms, on firms' ability to accommodate worker absences and reduced hours, and on the distribution of caregiving responsibilities within households. Policies that reduce the time cost of children while limiting firms' incentives to discriminate against caregivers are therefore likely to be especially valuable. Finally,

shifts in social norms toward a more equal allocation of caregiving responsibilities would both alleviate women's disproportionate care burden and reduce firms' incentives for statistical discrimination.

Taken together, the evidence and models in this chapter highlight a central lesson: workplace flexibility can support both female employment and fertility, but its effects depend critically on firm incentives, the organization of work, and the broader institutional environment.

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A Data Appendix: Spanish Data Sets

To study the different dimensions of workplace flexibility, we combine several complementary Spanish data sources. No single individual-level dataset contains all the relevant information on work schedules, caregiving responsibilities, wages, firm characteristics, and labor market histories. We therefore rely on four main sources: the Labor Force Survey, the Time Use Survey, the Salary Structure Survey, and Spanish Social Security records.

First, we use the *Encuesta de Población Activa* (EPA), conducted by the Spanish Statistical Agency (INE), which constitutes the Spanish component of the EU Labor Force Survey. The EPA, which we refer to below as the Labor Force Survey, is a quarterly household survey designed to measure labor market conditions in Spain. It covers approximately 50,000 households (around 120,000 individuals) and provides key information on employment, unemployment, labor force participation, and other labor market characteristics at both the national and regional levels. In particular, we use two specialized EPA modules: one on the organization and length of the workday, and another on the reconciliation of work and family life. These modules allow us to document workers' ability to organize and adjust their work schedules, as well as the relationship between caregiving responsibilities and labor market adjustments.

Second, we use the *Encuesta de Empleo del Tiempo* (EET), also conducted by the INE, which we refer to as the Spanish Time Use Survey. The EET is a periodic survey of roughly 9,500 individuals that records how people in Spain allocate their time across daily activities, including paid work, unpaid care, commuting, and personal time. We use the survey to document the prevalence of split-shift schedules and, more generally, the timing of work during the day. The EET is particularly useful for measuring the time cost associated with split-shift schedules, since it contains detailed diary information on when individuals are at work. We use the 2009–2010 wave, which is the latest available at the time of writing.

Third, we use the Spanish Salary Structure Survey, *Encuesta de Estructura Salarial* (EES), also produced by the INE. This survey covers about 28,500 establishments and provides detailed information on employees' wages, hours, and other job characteristics, including differences by sex, economic activity, and autonomous community. In this chapter, we primarily use the EES to examine how access to family-related margins of adjustment varies with establishment size. In particular, it allows us to document differences by firm size in reduced-hours arrangements, parental leave, and temporary disability leave.

Finally, we use Spanish Social Security records from the *Muestra Continua de Vidas*

Laborales con Datos Fiscales (MCVL), which we refer to as the Continuous Sample of Working Lives. The MCVL is a 4% random sample of individuals registered with the Spanish Social Security system in a given year, including those who are employed or receiving unemployment benefits. It provides retrospective, job-spell-level labor market histories back to first employment (or to 1980 for older cohorts), including start and end dates, employer identifiers, contract type, working hours, occupation, sector, industry, earnings, and unemployment spells. We use the MCVL to classify jobs and industries by the prevalence of long working hours to identify their degree of flexibility and to document gender differences in employment, fertility, and wage growth across flexible and non-flexible jobs. Further details on variable construction and sample definitions can be found in Guner et al. (2024) and Bover et al. (2025).