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Paternity leave in Spain

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Abstract
Between 2017 and 2021, Spain progressively extended paternity leave from 2 to 16 weeks, equalizing it with maternity leave and introducing mandatory weeks. A 2018 reform also allowed fathers to split their leave. Using administrative data on all leave permits since 2016, we analyze trends in paternity leave take-up. Following the introduction of mandatory leave, the share of fathers taking leave increased by around 20 percentage points, and most now use nearly the full entitlement. The share opting to split leave has steadily grown, surpassing 50% by 2023. However, this behavior shows marked heterogeneity: while overall uptake is uniform across groups, leave-splitting is far more common among higher-income fathers and more prevalent in certain sectors. Spain's experience illustrates how policy design can significantly increase paternity leave usage, though workplace flexibility and income-related constraints shape how fathers use that time.

Key words: paternity leave, reform, take-up, mandatory parental leave

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Data availability statement

Data availability statement: The administrative data used in this study are confidential and were accessed through a secure server provided by the Spanish Social Security Administration. Due to privacy restrictions and data protection regulations, these data cannot be made publicly available. Qualified researchers interested in accessing the data may submit a formal request to the Social Security Administration Research Room (solicitudes.sala-investigacion@seg-social.es). Access requires signing a confidentiality agreement and conducting all analyses via the secure computing infrastructure provided by the Social Security Administration.

1 Introduction

In most advanced economies, family policies designed to support mothers and pregnant women have been in place since the early twentieth century (Wikander et al., 1995). Initially, these measures were designed to protect both mothers' and children's health. With the massive incorporation of women into the labor market, maternity leave became an important tool for reconciling work and family life. With the goal of promoting gender equality in the labor market and in caring for children, many countries have begun to introduce non-transferable paternity leave (i.e., leave reserved exclusively for fathers). These policies aim to increase fathers' involvement in childcare from an early age, reduce the wage penalty associated with motherhood, and promote gender equality both at home and in the labor market (Farré and González, 2019; Kleven et al., 2019; Hupkau and Ruiz-Valenzuela, 2022).

Spain first introduced two weeks of paid paternity leave in 2007. Between 2017 and 2021, a series of five reforms have extended job-protected leave with full wage replacement to 16 weeks, matching its length to that of maternity leave.[1] Spanish paternity leave has several features that sets it apart from other countries. Since 2019, a portion of paternity leave in Spain has been made compulsory and must be taken immediately following the birth of a child—starting with two weeks in 2019, increasing to four weeks in 2020, and six weeks in 2021—ensuring that all fathers take at least part of their leave. To the best of our knowledge, besides Spain, there are only three other countries in Europe with a mandatory portion of paternity leave (Italy, France and Portugal), with Spain having the longest mandatory leave among these.[2] Additionally, both maternity and paternity leave can only be taken in the first year of the child's life, while it can typically be taken later in countries such as Norway, Sweden or Germany. Furthermore, as can be seen in Figure 1, Spain has no shareable leave that could potentially be taken up by either parent, unlike many other countries, such as Finland, the Slovak Republic, Hungary or Norway, where

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[1]The name of the allowance changed in 2019, when maternity and paternity benefits were abolished, and the Birth and Childcare Allowance was introduced. For simplicity, we will continue to refer to the leave enjoyed by fathers as "paternity leave", in line with the English term generally used in the literature.

[2]Portugal's mandatory part of leave is 28 days, Italy has a mandatory part of 10 days, and France has 4 days of mandatory leave (MISSOC, 2024).

the majority of leave is shareable between parents (and ends up being taken mostly by women). Also evident from Figure 1 is that Spain is among the countries with the lowest overall number of weeks of leave available to parents.

Using data from the National Institute of Social Security (INSS) and the General Treasury of Social Security (TGSS) for the universe of paternity and maternity leave permits, in this article we describe the use made of paternity leave since 2016. Our analysis examines several aspects of paternity leave: take-up of paternity leave at the extensive margin, the average duration of leave among fathers who take it, the proportion who choose to split their leave, and the duration of leave taken non-concurrently with the mother.

For each reform, we present difference-in-differences (DiD) estimates that compare changes in fathers' take-up of leave, leave duration and leave-splitting behavior before and after reforms. Mothers, whose maternity leave entitlement remained constant at 16 weeks during this period and who saw no changes regarding the mandatory portion of their leave, serve as the control group.

We first show that successive reforms had an impact on the take-up rate of paternity leave. After the 2017 reform, which extended paternity leave from two to four weeks, take-up increased by approximately 10 percentage points from a pre-reform mean of 46%, although part of this increase seems to be have been transitory. In 2019, when part of paternity leave was made mandatory, take-up increased by 20 percentage points compared to the mean in the month prior to the reform of 51%, and the 2020 reform further increased take-up by 1.4 percentage points. By 2023, the participation rate, that is, the share of all fathers who took paternity leave, reached 75.4%, surpassing that of mothers by nearly 10 percentage points.[3]

Our analysis of the intensive margin shows that as the various reforms have extended the generosity of paternity leave, men have reacted by taking almost the full additional leave available by law. The DiD estimates are positive and significant for all the five reforms, with magnitudes of 1.9 (extension by 2 weeks), 0.3 (extension by 1 week), 2.6 (extension by 3 weeks), 4 (extension by 4 weeks) and 3.8 weeks (extension by 4 weeks),

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[3]The fact that the share of fathers who take leave is higher than the share of mothers who take leave is related to eligibility: Mothers are less likely to fulfill the eligibility criteria linked to employment history than fathers.

respectively, for the reforms enacted from 2017 to 2021.

In addition, over time, we see a steady increase in the number of fathers choosing to split their paternity leave into intermittent periods. No one used leave-splitting when it was first introduced in 2018. In 2019, about 30% of the fathers chose to split their leave, while less than 5% of the mothers did so. DiD estimates confirm that the share of fathers splitting their leave after the 2020 and 2021 reform has continued to increase, by 7.5 and 3.8 percentage points more than mothers, respectively. For births occurring in September 2023, more than half of fathers split their paternity leave. Among men who split it, they initially take leave of a duration close to the number of mandatory weeks, and after that, they use up almost all of the remaining weeks during the first year after the birth of the child. Thus, the data suggest that the time that an average child is cared for by at least one of their parents in the first year of life has increased.

Besides introducing the possibility of splitting the leave, the 2018 reform also introduced the option of taking the non-mandatory weeks of leave on a part-time basis. Although the fraction of mothers that use this possibility for at least some part of the leave is negligible, more and more fathers are using this option since it was introduced. Administrative data indicate that, for births in 2019, almost 3% of fathers took part of their leave on a part-time basis. By 2023, this share had increased to about 7.1%.

We next heterogeneity in paternity leave uptake and splitting. We do so descriptively, by plotting the raw data by region, sector of economic activity, father's age range and father's income quartile, and in a regression context where we control for all these factors at the same time. This exercise shows minimal differences in leave duration (up to half a week), indicating widespread use of nearly the full 16 weeks of paternity leave across regions, sectors, age, and income. However, significant differences emerge in leave-splitting, particularly by income: fathers in the highest income quartile are 32 percentage points more likely to split their leave than those in the lowest quartile.

In summary, our analysis shows that in response to consecutive reforms to paternity leave, men are more likely to take up leave, they take longer leaves on average, and are more likely to split their leave — potentially to care for infants while mothers return to

work.[4] This behavior could, in turn, influence family dynamics, gender norms, and gender gaps in the labor market.

Based on the evidence reported in this article, we argue that the Spanish implementation of paternity leave has been widely successful when it comes to take-up. We review the elements that set Spain apart from other countries, and argue that a significant part of this success appears to stem from the system of incentives established by the law. These include a mandatory initial period of leave for fathers, no shared leave periods but only father- and mother specific, ear-marked periods, as well as the generous subsidy provided. Additionally, the relatively short duration of maternity leave in Spain, compared to international standards, suggests that paternity leave may be addressing a broader parental demand for delaying the transition to formal childcare or other informal, non-parental care arrangements.

Existing evidence on the effects of paternity leave extensions beyond take-up indicates mixed short-run impacts and potentially important long-run effects. In Spain, Gorjón and Lizarraga (2024) find that the recent increase to 16 weeks reduced men's employment and days worked within the first year after birth, while also lowering mothers' likelihood of being at work during the same period. Studies from Sweden and Spain (Avdic et al., 2023; Farré et al., 2024) show that fathers' leave can negatively affect children's development if paternal time substitutes maternal care without additional childcare support. Further, González et al. (2024) suggests that not all fathers use their leave purely to take care of their offspring, identifying a surge in paternity leave coinciding with the Qatar World Cup. Nevertheless, research points to longer-term gains for gender equality: Farré et al. (2023) and Fontenay and González (2024) document shifts toward more egalitarian gender norms among children exposed to expanded paternity leave policies. Yet these effects vary by household wage differences (González and Zoabi, 2021), highlighting that reform outcomes depend on family circumstances. Finally, aligning paternity and maternity leave durations may alter employer expectations and help narrow the child penalty experienced by mothers.

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[4]See Canaan et al. (2022) for a review of the take-up effects of paternity leave extensions in other countries. Albrecht et al. (2024) study the determinants of paternity leave take-up in Sweden by exploiting a reform implemented in 2002.

The remainder of the paper is organized as follows. Section 2 explains the institutional context and the details of the paternity leave reforms analyzed in this paper. Section 3 describes the data, Section 4 outlines the empirical strategy and Section 5 presents the results, including an analysis of heterogeneities in both the duration of paternity leave and leave-splitting. In Section 6, we discuss characteristics of the Spanish law that could explain the high take-up of paternity leave in Spain. Section 7 concludes.

2   Paternity leave reforms

In 2007, Spain introduced 13 days of paid paternity leave, which remained unchanged until 2017 (*Ley Organica 3/2007*, Boletin Oficial de Estado (2007)). Since then, five extensions have been implemented: from two to four weeks in January 2017, five weeks in July 2018, eight weeks in April 2019, 12 weeks in January 2020, and finally 16 weeks in January 2021. This last extension equaled the duration of paternity leave to that of maternity leave. Figure 2 illustrates the evolution of legal entitlements to leave reserved for fathers and mothers, providing a visual representation of how these policies have changed over the years.

In contrast, maternity leave legislation has seen little change during this period. Since 1989, mothers have been entitled to 16 weeks of leave, with six weeks being mandatory and the remaining 10 weeks optionally shareable with fathers. However, in practice, very few mothers chose to share their leave (Farré and González, 2019), and this option was eliminated in 2021. Eligibility criteria for both maternity and paternity leave are identical and are based on age-specific minimum social security contribution requirements prior to the child's birth.[5]

The first extension of paternity leave, from two to four weeks, came into force on January 1, 2017. This extension was envisaged in a 2009 law (*Ley 9/2009*, Boletin Oficial de Estado (2009)), but its implementation had been postponed through multiple rounds of

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[5]Individuals under 21 years are exempt from any contribution threshold. Those aged 21 to 25 must have contributed at least 90 days within the preceding seven years, with a cumulative total of 180 days. For individuals over 26, the requirements are more stringent, requiring a minimum of 180 days of contributions within the last seven years before the birth and a total of 360 days over their working life.

budget laws. Eventually, on December 16, 2016, the government announced that the increase in paternity leave would come into force for all children born on and after January 1, 2017. The full four weeks had to be taken at once and at any time during the mother's leave, but would typically be taken starting on the day of the child's birth. The 2018 extension (*Ley 6/2018*, Boletin Oficial de Estado (2018)), which increased paternity leave from four to five weeks, took effect on July 5, 2018, and for the first time allowed leave to be split into separate periods. The first four weeks had to be taken at once, typically immediately after birth, while the fifth week could be used flexibly — either on a full- or part-time basis — anytime before the child turned nine months old.

On March 1, 2019, the government passed the "Law on Urgent Measures to Guarantee Equality between Men and Women" (*Real Decreto-Ley 6/2019*, Boletin Oficial de Estado (2019)), which came into force on April 1, 2019. This law outlined a phased increase in leave reserved for fathers: from five to eight weeks for children born on or after April 1, 2019, to 12 weeks for those born on or after January 1, 2020, and to 16 weeks for those born on or after January 1, 2021.

The 2019 reform not only increased the duration of paternity leave but also made part of it mandatory.[6] The mandatory portion of leave expanded alongside the overall increase in leave duration: from two mandatory weeks in 2019, to four in 2020, and six in 2021. The reform also introduced the possibility for fathers to transfer part of their leave to mothers, starting with four transferable weeks in 2019, reduced to two weeks in 2020, and ultimately eliminating this option in 2021. Table 1 summarizes the key features of maternity and paternity leave policies over time, including leave duration and payment structure.

Spain has introduced several other policies to support work-life balance for families with children. Since 2013, parents can take unpaid parental leave for up to three years after the period of paid maternity/paternity leave, with the right to return to their job. Additionally, since 1999, either parent has been able to reduce their working hours by up to 50% (with a proportional reduction in salary) until their child turns 12.[7] In practice,

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[6]The leave is processed automatically by the firm and the INSS (National Institute of Social Security). The worker cannot reject the mandatory part of the leave.

[7]Initially, the policy applied to children under 6 years old, but the age limit was raised to 8 years in 2007

however, these policies are predominantly used by mothers. For instance, in 2010, nearly 20% of eligible women under 45 reduced their working hours for childcare, compared to almost no men (Fernández-Kranz and Rodríguez-Planas, 2021). This gender disparity is also evident in part-time work: in 2019, women with children aged 0 to 15 were more than seven times as likely as men with children of the same age to work part-time, whereas this gap was negligible among men and women without children (Hupkau and Ruiz-Valenzuela, 2022).

3   Data

To examine how paternity leave usage has evolved after the reforms, we use administrative data from the National Institute of Social Security (INSS) and the General Treasury of Social Security (TGSS), provided by the Social Security Data Office. The dataset includes all maternity and paternity leave processes for births between January 2016 and September 2023, covering over 1.4 million births with maternity leave and nearly 1.5 million births with paternity leave.[8] Because this data comes from the Social Security, it only includes information on parents who used their entitlement, i.e., who took at least part of their paternity or maternity leave.

For our main analysis, we exclude maternity and paternity leave spells associated with multiple births and those taken by self-employed parents, although our conclusions remain largely unchanged when including births to self-employed individuals or those in special social security schemes. The data does not include a child identifier, so we do not observe mother-father pairs. We will not be able to compute, therefore, the total amount of leave taken at the household level. However, we will impute leave overlaps between mothers and fathers by leveraging the fact that almost all mothers take the entirety of their maternity leave entitlement at once, starting with the birth date of the child.

To analyse take-up, we complement the administrative data on leave taking with data

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and 12 years in 2013.

[8]Because women have lower labor market participation, they are less likely to be able to claim maternity leave once the child is born. This explains why we observe a higher number of paternity leave permits than maternity leave permits.

from the Spanish National Institute for Statistics (*Instituto Nacional de Estadisctia*, INE) on the number of daily births from 2016 to 2023.

4 Empirical strategy

We are interested in studying both extensive and intensive margin take-up changes in response to the reforms. Below we present the empirical strategies for both margins.

4.1 Take-up at the extensive margin

The reforms under study were all aimed at increasing the length of paternity leave. It is not obvious that these reforms should have an effect on take-up at the extensive margin, unless a longer leave length makes leave-taking overall more or less attractive for fathers. However, the 2019 reform made paternity leave partially mandatory (for the first weeks after birth), whereas the first six weeks of maternity leave had long been mandatory for mothers. This policy change aimed to increase fathers' take-up of leave and is likely to have had the largest impact on extensive margin take-up among all reforms. We study changes in take-up at the extensive margin for all reforms, with a particular focus on the 2019 reform.

To study take-up at the extensive margin, one would ideally have data both on those who use their leave, as well as on the eligible population. Although we do not directly observe the number of eligible fathers (i.e. those meeting contribution and employment requirements), we use the number of births as a natural proxy for the potential father population. We observe daily data on the number of births (from INE (2024)) and the number of fathers (and mothers) taking leave from the administrative records described above. We adapt the approach proposed by Leroy (2024), who studies extensive margin welfare take-up responses after the reform of a French in-work transfer program, to our setting. Crucially for this approach, eligibility criteria (e.g. required social security contributions and employment status) did not change with the reforms. Under assumptions we will detail below, we can infer changes in the take-up rate of paternity leave from changes in

the observed participation rate, defined as the number of paternity leave permits taken divided by the number of births.

To do so, let F_t be the number of fathers taking paternity leave on day t, and let B_t be the number of births on day t. We define the participation rate among fathers as

$$P_t = \frac{F_t}{B_t}, \tag{1}$$

which measures the fraction of all new fathers (i.e., all births) who go on paternity leave on day t . While P_t is directly observable, it can be decomposed into two quantities that are typically not both observed: the share of fathers eligible for paternity leave and the take-up rate among those eligible. To formalize this, define the take-up rate T_t and the eligibility rate E_t as follows:

$$T_t = \frac{F_t}{N_t}, \quad \text{and} \quad E_t = \frac{N_t}{B_t}. \tag{2}$$

Here, T_t is the fraction of all eligible fathers N_t who use their paternity leave entitlement, and E_t is the fraction of fathers (out of all births B_t) who meet the eligibility criteria. The participation rate in (1) can be written as

$$P_t = \frac{F_t}{B_t} = \left(\frac{F_t}{N_t}\right) \times \left(\frac{N_t}{B_t}\right) = T_t \times E_t. \tag{3}$$

Under the assumption that the eligibility rate E_t remains stable or changes only marginally over the period of interest (e.g., due to unaltered policy rules and no sudden shifts in labor market conditions), any observed variation in P_t can be primarily attributed to changes in T_t. Hence, if a reform is introduced that affects fathers' likelihood of taking leave—for example, by making paternity leave mandatory—an increase in P_t reflects an increase in the take-up rate T_t. Formally, assuming $E_t \approx E_{t+\Delta}$, changes in P_t mirror changes in T_t:

$$\Delta P_t \approx E_t \, \Delta T_t.$$

This result underpins our empirical strategy, in which we interpret shifts in the observed

participation rate P_t as evidence of shifts in the true take-up rate T_t, given stable eligibility.

To identify the effect of the reforms on paternity leave, we implement a difference-in-differences (DiD) design using mothers as a control group. Mothers, for whom leave was already mandatory throughout the whole period and whose eligibility criteria did not change over time, provide a suitable counterfactual, since their leave-taking behavior should be unaffected by the reforms but subject to the same seasonal and temporal factors (e.g., day-of-week or month-of-year variation). Figure 3a illustrates the participation rates for men and women from 2016 to 2023 calculated on a weekly basis (i.e., the number of permits started in a given week divided by the number of births in the same week), showing a stable trend among mothers and thereby supporting their selection as a control group.

Our specification, which we estimate in a small window of +/- 30 days around the reform dates to ensure our assumption on stability in the eligibility rate is likely to hold, is given by:

$$P_t = \alpha + \tau \operatorname{Male} + \beta_1 \operatorname{PostReform}_t + \beta_2 \left(\operatorname{Male} \times \operatorname{PostReform}_t \right) + \gamma_w + \gamma_1 \operatorname{dob}_t + \epsilon_t. \tag{4}$$

P_t is the participation rate on day t, that is, the share of fathers with births on date t who started their paternity leave on date t; $Male$ is an indicator that equals one if the observation refers to fathers, and zero if it refers to mothers; $PostReform_t$ is an indicator that equals one on and after the reform date (e.g., April 1, 2019) and zero before. Here, τ captures any baseline difference in participation rates between fathers and mothers before the reform. The coefficient β_1 estimates any general shift in participation after the reform that is common to both fathers and mothers (e.g., due to time trends or seasonality). Finally, the interaction coefficient β_2 is the difference-in-differences estimator of interest; it measures the additional post-reform change for fathers above and beyond any shifts experienced by mothers.

If $\beta_2 > 0$, it indicates that fathers' participation rate rose significantly more than mothers' following the policy, consistent with the reform causing an increase in paternity leave take-up. Assuming the fraction of eligible fathers remains stable, these DiD estimates can

be interpreted as capturing changes in the take-up rate T_t.

We further control for day-of-week fixed effects (γ_w), e.g., dummies for Monday, Tuesday, etc., allowing for different baseline participation rates on each day of the week, and a linear time trend (dob_t) in the day of birth (or date), capturing any broad temporal trend in participation over calendar time. The key identifying assumption of the DiD design is that, in the absence of the reform, the difference in fathers' and mothers' participation rates would have remained constant.

We exclude a small number of outliers from our regressions where the estimated participation rate is above one. Such observations occur for fathers, mainly before April 2019, where the leave did not necessarily start with the birth date of the child and fathers were more likely to start their leaves on Mondays after the birth date. We also exclude the day before and the day of the reform (doughnut estimator). We also show estimates where we include all observations (including outliers and the day just before and of the reform) in the two-month window around the reform in the Online Appendix and using an alternative regression-discontinuity differences-in-differences specification (RD-DiD).[9]

4.2 Evolution of leave duration and leave-splitting

We study the impact of paternity leave reforms on total duration of leave and other aspects of leave-taking behavior using the universe of fathers who commenced leave between 2016 and 2023. Figure 4 displays the average duration of maternity and paternity leaves taken between January 2016 and September 2023, by year and month of birth. Vertical dotted lines mark the introduction of each of the five paternity leave extensions. The data reveal that maternity leave duration has remained stable at 16 weeks throughout the whole period, as would be expected considering that maternity leave was left un-

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[9]The RD-DiD model uses the following estimation equation:

$$P_t = \alpha + \tau \cdot \text{Male} + \beta_1 \cdot \text{PostReform}_t + \beta_2 \cdot (\text{Male} \times \text{PostReform}_t) + \gamma_w + \gamma_1 \cdot \text{dob}_t$$
$$+ \gamma_2 \cdot (\text{dob}_t \times \text{Male}) + \gamma_3 \cdot (\text{dob}_t \times \text{PostReform}_t) + \gamma_4 \cdot (\text{dob}_t \times \text{PostReform}_t \times \text{Male}) + \epsilon_t$$

All terms in the first row of this equation are defined as in Equation 4, but we add a linear trend in the running variable for males pre-reform (δ_2), and for females and males for the period after the reform (δ_3 and δ_4, respectively). The interaction coefficient of interest is again β_2, which shows the differential change in the participation rate for men versus women after the respective reform dates.

changed.[10] In contrast, paternity leave duration has steadily increased in alignment with legal reforms, closely approaching the maximum entitlement specified by law. This supports using mothers as a control group in a difference-in-differences (DiD) framework to study changes in paternity leave duration before and after each reform.[11] We estimate the following equation separately for each reform:

$$Y_{it} = \alpha + \tau\,\mathrm{Male}_i + \beta_1\,\mathrm{PostReform}_t + \beta_2\left(\mathrm{Male}_i \times \mathrm{PostReform}_t\right) + \epsilon_{it}. \qquad (5)$$

For an individual i who had a child on date t, Y_{it} represents either (i) the total leave duration in weeks, or (ii) a binary indicator that equals one if the leave was taken in two or more intermittent periods (leave splitting), and zero otherwise. $Male$ is a dummy variable equal to one for fathers and zero for mothers; and $PostReform$ is a dummy variable taking on value one if the child is born on or after the reform cut-off date, and zero if it is born before. The DiD coefficient of interest is β_2, which measures the difference in the difference in the outcome between the pre- and post reform period (1st difference) and fathers and mothers (2nd difference). Finally, ϵ_i is the error term, which we cluster at the individual level.[12] All specifications use a bandwidth of +/- six months around the reform cut-off. We will also report estimates when controlling for predetermined characteristics of the parent: dummies capturing the sector of economic activity (at the 1-digit/section ISIC level) and province of the individual's main employment, parent's age range dummies (16-25, 26-35, 36-45, 46-55, and 56-65), and dummies indicating the person's income quartile.

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[10]Some of the paternity leave extensions included the option that fathers transfer some of their leave to mothers. However, this option was barely used.

[11]In the case of leave-splitting, this option was first introduced in 2019 for mothers, which has to be kept in mind given that we use them also as a control group when studying changes in leave-splitting. In any case, we do not claim causality of these estimates but regard them as descriptive evidence of how behavior changed in response to the different reforms.

[12]The data does not contain information on family structure, so we cannot identify households, i.e. the mother and father of a child.

5 Results

5.1 Take-up at the extensive margin

Figure 5 shows the raw data and averages by gender for the pre- and post-reform periods for each of the five reforms. The first thing to note from the figures is that, indeed, the reforms did not have any impact on female participation, while we see clear jumps in average participation for men for the 2017 and 2019 reform. Looking at the regression results from estimating Equation 4 separately for each reform between 2017 and 2021 in Table 2, we find a significant increase in the participation rate for men following the 2017, 2019, and 2020 paternity leave reforms.

The 2017 reform, which expanded paternity leave from two to four weeks, led to an estimated 10 percentage-point rise in male participation from a pre-reform mean of about 46%. By the month prior to the subsequent reform in 2018, the average participation rate stood at around 51%, suggesting that only about half of the initial impact persisted.

The 2019 reform, which introduced a mandatory two-week period right after birth, produced the largest observed change. Our estimates indicate that it raised fathers' participation by approximately 20 percentage points relative to a pre-reform mean of 55% in March 2019. By December 2019, the rate remained near 69%, pointing to a sustained rather than a transient effect. In contrast, the 2020 reform, which extended the mandatory portion of leave from two to four weeks (and total leave by four weeks), yielded a more modest yet still significant increase of about 1.4 percentage points. Strikingly, and in line with a substantially higher labor force participation rate of men than women in Spain (Hupkau and Ruiz-Valenzuela, 2022) and therefore higher eligibility rate, after the 2019 reform, male participation rates in parental leave take-up exceeded female participation rates for the first time (see Figure 5c), and have ever since.[13]

Looking at more recent data through 2023 (see Figure 3b), men's participation now stands at about 75%, compared to 66% for women. While we do not have data on the the share of fathers eligible for paternity leave in Spain, estimates suggests that this stood

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[13]Robustness checks shown in Online Appendix Tables A1 and A2 confirm that our results are robust to including all observations in the sample and using as an alternative specification the RD-DiD design specified in footnote 9.

roughly at 67% in 2016 (EIGE, 2020), and has likely risen since then with improved economic conditions and more fathers and mothers fulfilling eligibility criteria linked to employment and social security contributions. Taken together, the evidence suggests that take-up for eligible fathers is probably universal nowadays.

Several factors might explain the varying magnitude and persistence of these reforms' effects. First, the 2017 reform, which was the first extension in a decade, likely attracted considerable media coverage and raised awareness among fathers. Second, the 2018 reform added only one week of leave, likely generating less attention. Third, making part of paternity leave compulsory in 2019 appears to have permanently altered behavior, as men who are legally required to take two (later four and now six) weeks may then be encouraged by workplace norms and expectations to using the leave. Over time, employers may adapt HR policies and organizational culture to reduce any perceived or actual costs of fathers taking leave. Fourth, while eligibility depends on employment and contribution records, the underlying criteria did not change, and it is plausible that labor market conditions remained stable in the close window around the reforms we study. As a result, the observed increases in participation primarily reflect genuine shifts in fathers' take-up rather than expansions in the pool of newly eligible individuals.

In summary, these findings indicate that successive reforms to paternity leave substantially raised fathers' participation rates, especially when they were salient and introduced mandatory components. By 2023, men's paternity leave take-up surpassed the participation rate among women and reached levels consistent with universal use among eligible fathers. The evidence thus underscores the potentially transformative impact of extending and mandating paternity leave in shaping parental leave-taking behaviors.

5.2 Leave duration and leave-splitting

Leave duration Table 3 presents overall results on leave durations (Columns 1 and 2) separately for each reform. Each panel shows β_1 (change in maternal behavior after the reform) and β_2 (the DiD estimate of interest), along with the mean and standard deviation of the dependent variable for fathers in the pre-reform period. Columns 1 and 2 show results without and with pre-determined controls, respectively. Notably, the DiD estimates

barely change when controls are added, so we focus on Column 2.

As expected, we estimate precise zero effects for mothers on the number of maternity leave weeks used post-reform (coefficients on $PostReform$ in Table 3). As for fathers, they were already taking nearly the full entitlement in the pre-reform periods, as reflected in the pre-reform means. The DiD coefficients ($PostReform \times Male$) indicate significant increases in paternity leave duration following each reform, closely aligning with the legal extensions: 1.9, 0.3, 2.6, 4, and 3.8 weeks compared to the respective extensions of 2, 1, 3, 4, and 4 weeks.

This widespread uptake was not obvious, especially before mandatory paternity leave was introduced in 2019. Even after 2019, the mandatory portion of leave was much smaller (4 weeks in 2020 and 6 weeks in 3021) than the full entitlement. Taken together with the results on extensive-margin take-up, these results indicate that even fathers who were pushed into taking leave because it became mandatory are making full use of their leave and not just the mandatory portion.

Leave-splitting   As of 2018, fathers are allowed to split their leave into an initial period, and subsequent periods that can be taken during the first nine months of the child's life (as of 2019, this period was extended to the first 12 months). Figure 6 shows the percentage of fathers and mothers who decide to split their leave since 2016. Although the 2018 reform, which extended paternity leave from four to five weeks, was the first to introduce the option of splitting from the fourth week (that is, taking 4 weeks at once, and then another one afterwards, but before the child turns nine moths), the data indicate that fathers did not use this possibility. From the 2019 reform, the percentage of fathers who decide to split leave has increased considerably. Moreover, the trend is clearly upward, from around 20% of fathers splitting in April 2019 to more than half of them (about 55%) for births taking place in September 2023. This behavior differs from that of mothers, of whom very few decide to split their leave. However, as for fathers, the share of mothers deciding to split their leave also shows an upward trend since 2019. By September 2023, about 8% of mothers were splitting their maternity leave.

We use the DiD setting described in Equation 5 to study post-reform changes in leave-

splitting for fathers.[14] The results are shown in Columns 3 and 4 of Table 3. As with leave duration, adding predetermined controls in Column 4 produces very similar results, so we will focus on these estimates. Unsurprisingly, we do not observe any leave-splitting around the 2017 reform, because this option was not available then. We neither observe that the 2018 reform, which first introduced splitting for fathers only, had any effect on the share of fathers splitting their leave.

Looking at the 2019 reform, note that no fathers or mothers were splitting the leave prior to this reform. After the reform, which first introduced splitting for mothers, mothers see an increase by 1.5 percentage points, whereas fathers see an additional increase by 30 percentage points. The DiD coefficients for the fourth and fifth reforms continue to show significant increases (though of a lesser magnitude) of 7.5 and 3.8 percentage points, respectively, for fathers, and much smaller increases for mothers (up to 1 percentage point). The latter increase for fathers is still sizeable: relative to the dependent variable mean for men of 48% prior to the reform, leave-splitting further increased by 8% after the reform of 2021.

It might seem surprising that leave-splitting did not gain any traction among fathers until the 2019 reform, even though the option had already been available since July 2018 for men. However, a closer look at the law and the characteristics of the reform sheds light on why this option may not have been used in 2018. First, the 2018 reform is the one with the smallest absolute increase of paternity leave of only one week. Second, it is only the fifth week that could be used in a non-consecutive manner. This, together with the fact that the possibility of splitting the leave might have lacked visibility, could explain why we do not see fathers using the splitting option in 2018.

However, the most important reason might be that the 2018 law clearly specified that splitting the leave was only possible if there was a previous agreement between the firm and the worker, and this needed to be decided already at the beginning of the overall paternity leave period. The requirement for a prior agreement between the firm and the

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[14]We are aware that this is not fully appropriate given the fact that leave-splitting was first introduced for mothers in 2019, and hence mothers might not constitute a good control group. The results presented here should thus be interpreted as descriptive evidence of differential changes in behavior of mothers and fathers in response to the different reforms.

worker is not mentioned in the 2019 law (Boletin Oficial de Estado, 2019), according to which the splitting of the leave only needed to be communicated to the firm with a 15 days notice (prior to taking the voluntary portion of the leave). Therefore, it looks like with the 2019 reform, it became easier, from a legal point of view, to use the option of splitting paternity leave.

The 2019 law also introduced compulsory weeks right after the child's birth for fathers. This introduces a clear distinction between the compulsory period and the voluntary period, which can be taken at any point before the first birthday of the child, and gives salience to the option of splitting leave. It also made more sense to split the leave as the number of voluntary weeks increased to 6, 8 and 10 weeks, respectively, in the 2019, 2020 and 2021 reforms, entailing a considerable rise in the total number of weeks available in two-parent households.

Overall, the analysis of the administrative data suggests that, as paternity leave becomes more generous and families understand how it works, more new parents are splitting leaves, especially fathers. This allows to extend the total number of weeks where at least one parent can be at home with the child.

Analyzing the subsample of fathers who split their paternity leave, we can see how many weeks they use in the initial period, and how many weeks they take in successive periods. This is what we show in Figure 7. For each of the three last reforms (starting in April 2019), we see that the initial period (red line) enjoyed by fathers is only slightly higher than the number of mandatory initial weeks established by law (dashed line). At the end of the period of our analysis, and after the fifth reform came into force, we observe an average initial period of about seven weeks, and a subsequent period of about nine weeks. Note that among fathers who split their leave, the average total duration of paternity leave (blue line) is identical to the legal entitlement in each period.

The data shown in Figures 6 and 7 suggest that a certain degree of learning is occurring. As parents become aware of the possibility of splitting their leave, more fathers are choosing this option, thereby extending the total period during which at least one parent remains at home with the child. Moreover, as the share of fathers who split their leave continues to rise, this arrangement may be gaining popularity and becoming more accepted

by employers. Such positive peer effects have been documented in other contexts—for example, following the introduction of paternity leave in Norway (Dahl et al., 2014).

The data suggest that for fathers who choose to split their leave, the number of weeks taken concurrently with the mother increasingly aligns with the initial number of weeks mandated by law. This pattern is illustrated in Figures 8a and 8b. When considering the full sample (Figure 8a), we observe that the length of leave taken concurrently with the mother remains well above the legally required minimum. On average, fathers whose children were born after January 2021 take 12 out of the 16 weeks while the mother is also at home. However, as the share of voluntary leave increases, so too does the number of weeks taken non-concurrently with the mother. When restricting the sample to fathers who split their leave (Figure 8b), the number of concurrent weeks more closely approximates the initial mandatory duration. Following the reform implemented in January 2021, the average duration of simultaneous leave with the mother stands at around eight weeks—just two weeks more than the six compulsory weeks required by law-for the population of fathers who split their leave.

Legislation clearly influences behavior and has allowed young parents to more flexibly plan their leave-taking. However, the compulsory nature of the initial weeks potentially limits parent's options. Although there is evidence that the father's presence at home in the first months after childbirth has positive effects on mothers' health (Persson and Rossin-Slater, 2024), it may also limit the positive effect of the policy in increasing fathers' involvement in childcare because they are not caring for their children on their own. In many countries, simultaneity of leave taking is therefore limited. Sweden, for instance, only allows for 30 days of simultaneous leave (Persson and Rossin-Slater, 2024).

Other than the possibility of splitting the leave, the reform of 2018 also introduced the possibility to use the voluntary part of the leave on a part-time basis. Although the fraction of mothers that use this possibility is negligible, more fathers are using this option since it was introduced. Administrative data indicate that, for births in 2019, 3% of fathers took part of their leave on a part-time basis. By 2023, this fraction had increased to 7.1%.[15]

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[15]However, it is too early to understand whether this is an increasing trend. For births occurring in 2021 and 2022, the fraction of fathers taking some leave on a part-time basis were very similar - standing at 7.4%.

5.3   Heterogeneity in the use of paternity leave

Our data allow us to study heterogeneity in the use of paternity leave between Autonomous Communities (AC), by father's sector (in the main employment), by age range of the father and by quartile of father's monthly income.[16] Figure 9a presents regional patterns in paternity leave duration for children born in 2022, the most recent full year for which we can observe leave-taking during the child's first year of life. Regional differences are minimal, with average durations ranging from 15.2 weeks in Extremadura to 15.7 weeks in the Basque Country—a difference of just half a week. Figure 9b reveals similarly modest variation in paternity leave duration across economic sectors. Average durations range from 15.1 weeks in the real estate sector to 15.8 weeks in public administration—a difference of just 0.7 weeks between the sectors with the shortest and longest leaves. Figure 9c shows that paternity leave duration varies little by father's age at birth, with the two largest groups—fathers aged 26-35 and 36-45—taking leaves of 15.5 and 15.6 weeks respectively. Similarly, Figure 9d reveals a slight income gradient in leave duration: while fathers in the top two income quartiles take the longest leaves at 15.6 weeks, the gap between the lowest and highest quartiles remains under one week.

   While leave duration shows minimal variation, we observe substantial differences in how fathers split their leave depending on their characteristics. Geographically, Figure 10a reveals that split-leave usage ranges from 37-44% in the Canary Islands and Andalusia to nearly 70% in Navarre and the Basque Country. These regional patterns appear linked to local employment structures, as shown in Figure 10b. Sectors with high split-leave rates (above 70%) include professional and scientific activities, information and communication, and financial services, while the accommodation and food service sector—prominent in regions like the Canary Islands—shows the lowest rate at 35%.

   Age and income also strongly correlate with split-leave patterns. Figure 10c shows

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[16]We base income quartiles on the so called regulatory base ("base reguladora"). This is a reference amount used by the Spanish social security system to calculate various benefits, including paternity leave payments. It represents an average of the worker's gross salary over a specific period, subject to a legally established maximum threshold. While this measure correlates with actual earnings, it may underestimate true income for high earners since it is capped, and its calculation method (averaging over a specific period) might not perfectly reflect current earnings. Therefore, when we use the regulatory base to construct income quartiles, these should be interpreted as quartiles of social security-relevant earnings rather than actual income quartiles.

that 58% of fathers aged 36-45 split their leave, compared to just 28% of those aged 16-25. Similarly, Figure 10d reveals a stark income gradient: 73% of fathers in the highest income quartile split their leave, versus 30% in the lowest quartile. These systematic differences across territory, sector, age, and income suggest that split-leave usage is shaped by both individual characteristics and workplace factors, potentially reflecting varying degrees of employer flexibility or acceptance of leave-splitting practices.

We now turn to analyzing differences in both paternity leave duration and the fraction of fathers that decide to split their leave when controlling for all these factors (region, economic sector, and father's age and income quartile) at the same time in a linear regression context. We divide the results in three different tables for expositional clarity only. Thus, Tables 4, 5 and 6 show the results of two regressions, when the dependent variables are weeks of paternity leave duration (in Column 1), and whether the father splits his paternity leave (in Column 2).

After controlling for father's sector of main employment, age range and income quartile, the overall patterns in Table 4, Column 1, are similar to those depicted in Figure 9a. All the coefficients in this table need to be interpreted as differences with respect to the region of Madrid, which is the omitted category in the regression. The variation in the number of paternity leave weeks used by fathers by region continues to be very small, and most regions do not show significant differences with Madrid's paternity leave duration after adding controls. However, the differences for regions in either extreme of the duration distribution continue to be significant (with Extremadura showing a coefficient indicating a 0.26 weeks lower duration, and Navarre and the Basque country showing a 0.13 and 0.18, respectively, higher duration). Something similar happens when looking at Column 2, where the dependent variable is whether the father has split his leave. However, here differences between regions seem to be a bit smaller once we have taken into account that regions have different industry compositions, income distribution and populations with different age profiles. Still, the overall ranking seems to hold, with Andalusia and the Canary Islands making less use of the possibility to split paternity leave compared to the omitted category (Madrid), and the same top four regions shown in Figure 10a appearing as the ones with the highest fraction of fathers splitting leave, even after adding controls.

In Table 5, we show the coefficients of the 1 digit sector dummies (controlling for region, income quartile and age group, not shown), with the omitted category being manufacturing. Again, the results in Column 1 show that there are no big differences across sectors when it comes to average paternity leave duration. The difference between the sector with the shortest duration (real estate, about half a week less than manufacturing) and public administration (about 0.13 weeks more compared to manufacturing) are of less than a week. In terms of splitting leave, Column 2 shows that the differences attenuate when controlling for region, father's age range and income quartile, in line with the fact that sectoral needs are different, and the distribution of workers' characteristics varies at the sector level. While we do not have information on the level of education of the workers, we proxy for that by controlling for income quartile dummies.

Table 6 shows the results of the coefficients for the father's age range dummies (where the omitted category is the range going from 26-35) and the father's income quartile (where the omitted category is the first quartile), while controlling for region and sector (not shown). The results in Column 1 show the same inverted U-shape pattern with respect to father's age, with lower paternity leave durations at both younger and older ages, but differences being very small with respect to the omitted category (differences in average duration of 1 to 2 days only). By father's income quartile, the results after adding controls also hold. Durations are of about half a week longer for the third and fourth quartile. The same inverted U-shape pattern found for average duration according to father's age is also found for whether fathers split their paternity leave (Column 2), with younger fathers splitting their leave by about 12 percentage points less than fathers aged 26-35. The income gradient in split-leave usage persists even after controlling for other factors and emerges as the strongest predictor of leave-splitting behavior. Compared to fathers in the lowest income quartile, the probability of splitting leave increases by 6 percentage points for those in the second quartile, rising substantially by 18 and 32 percentage points for the third and fourth quartiles, respectively.

Our analysis reveals two distinct patterns in paternity leave usage. First, the take-up of the full 16-week leave entitlement is remarkably uniform, with differences of at most half a week across regions, sectors, age groups, and income levels. Second, the practice of

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splitting leave into multiple periods shows substantial variation, particularly by income. Even after controlling for regional, sectoral, and age differences, fathers in the highest income quartile are 32 percentage points more likely to split their leave than those in the lowest quartile—a striking difference given that the overall split-leave rate is 56%.

The observed income gradient in leave-splitting behavior likely reflects both financial and workplace flexibility factors. While we cannot directly test for this, as we have no data on occupations, and workplace flexibility likely depends on occupational characteristics, it is likely that higher earners may have more bargaining power and job security, making it easier to negotiate multiple leave periods with employers. They may also be more aware of the option to split leave or feel more comfortable exercising that right. On the sector side, differences in operational demands, staffing arrangements, and organizational culture can either encourage or discourage splitting. Sectors characterized by knowledge-intensive or desk-based work may offer greater autonomy and scheduling flexibility, while sectors with more rigid shift structures or high turnover (e.g. accommodation and food services) can create practical barriers to splitting.

6   Discussion

Our analysis shows that fathers have consistently maximized their paternity leave entitlements as they expanded, taking nearly the full amount of available leave rather than just the mandatory minimum. We also observe an evolving pattern in how fathers structure their leave. By September 2023, more than half of fathers were splitting their entitlement into two periods: an initial period approximating the mandatory weeks, followed by a second period where they take almost the entirety of the remaining entitlement. This split-leave approach effectively extends the total duration over which at least one parent is available to care for the child at home.

A review of the literature by Canaan et al. (2022) shows that, in general, the introduction of paternity leave in other advanced economies has had mixed success in terms of utilization. The most successful of the cases they analyze is Iceland, where Olafsson and Steingrimsdottir (2020) find that the introduction of three months of paternity leave re-

served exclusively for fathers increased fathers' use of leave by just over 80%. In terms of duration, and even though the total leave of nine months can be divided between the father and the mother, fathers on average take leave of only slightly above the three months reserved exclusively for them. That is, fathers take the part of the leave that the other parent would otherwise not be able to take, but they do not take leave beyond the months reserved for them.

Sweden is another example. Since 1974, fathers and mothers have been able to take paid maternity/paternity leave (with almost full wage-replacement, though this decreases with leave duration), but the use of this leave by fathers has remained very low. In 1995, fathers used only 10% of the days available to both parents (Campa, 2024). To increase the use of paternity leave, Sweden introduced 30 days reserved exclusively for fathers, and that increased fathers' take-up by an average of 15 days, representing a 50% increase in take-up compared to the pre-reform period (Ekberg et al., 2013). This increase came from fathers that before the reform did not take any leave days. Successive reforms in 2002 and 2016 further increased the non-transferable portion, to 60 and 90 days respectively. Analyzing the 2002 reform, Avdic and Karimi (2018) show that it further increased the use of leave by fathers, but this effect was coming from fathers who were already prone to take leave, thus increasing the average duration from around 30 days to more than 50. As Campa (2024) points out, fathers with worse working conditions and lower incomes than mothers tend to systematically resist taking paternity leave, despite strong incentives (e.g., leave is paid at almost 100% of take-home pay and, moreover, because it is reserved for fathers, it is forfeited if not used). Aldén et al. (2023) analyze this pattern over time and conclude that reforms that introduce a non-transferable share for each parent will have limited impact on fathers who do not take any paternity leave. They suggest that policies need to focus on lack of economic resources and security, or changes in gender norms. Our analysis shows that making paternity leave, or a portion thereof, mandatory can have significant impacts on take-up and might.

The cases of Iceland and Sweden are among the most successful. However, Canaan et al. (2022) highlight that, within Europe, the introduction of fathers-only leave in Germany and Denmark have been among the least effective in increasing the number of days of

paternity leave that end up being used by fathers. This contrasts with the Spanish case, where we have shown take-up rates to be basically universal and fathers to be taking their full entitlements. We suggest four distinct elements that could explain the successful uptake of paternity leave in the Spanish case.

The first factor is that the 16 weeks are exclusive (i.e., non-transferable) to the father. If the father does not use them, the mother cannot take them. In a context where maternity leave is of relatively short duration compared to other advanced economies (16 weeks compared to 51 weeks on average in OECD countries (OECD, 2023)), the increase in paternity leave to 16 weeks implies an almost two-fold increase in the total number of weeks of leave (if taken non-simultaneously by both parents). The data for Spain indicates that an increasing fraction of fathers splits their leave into multiple periods (more than 50% among those with children born in 2023), thus lengthening the period in which one of the two parents can be at home with the child. However, the non-transferability of paternity leave probably does not explain all the increase in the average length of leave observed in Spain.

A second aspect for which Spanish paternity leave stands out is its generosity. As noted in Table 1, the worker receives 100% of his or her salary. As per 2024, only workers with a salary of more than 4,720.50 euros per month had a cap on the benefit, which in many cases is supplemented by the company to reach the usual net salary.[17] In addition, the benefit is exempt from personal income tax from the moment it is received. Therefore, during the weeks of maternity and paternity leave, most workers are receiving a higher net salary.[18]

A third important factor is the mandatory nature of the initial weeks of leave. Since April 2019, part of paternity leave has been made mandatory. Before 2019, around 55% of potentially eligible fathers were taking paternity leave—this figure includes cases where the father may not have been eligible or present (e.g., non-working fathers or births to

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[17]To be more specific, the leave is paid at 100% of the regulatory base. The regulatory base is the result of dividing the contribution base of the month prior to the leave by 30 days if the worker has a monthly salary. The regulatory base has a maximum that is determined by the maximum contribution base, which can vary from one year to another. Workers who receive a salary higher than the maximum of the regulatory base receive a payment equal to that maximum. Approximately 5% of workers receive the maximum benefit. The last column of Table 1 shows the maximum benefit by period.

[18]The income tax exemption was introduced in 2018 and applied retroactively to all permits since 2014.

single mothers). After the reform, uptake jumped by about 20 percentage points—a substantial extensive margin effect. After the reform we continue to observe that fathers take the full entitlement, and not just the mandatory part. Of course, this does not necessarily mean that all fathers are getting highly involved, but taking leave now seems to be the norm. We also do not know whether fraud might be prevalent (men working even though they are on leave). However, making the post-birth weeks of paternity leave mandatory could be making it easier to take the full amount of leave, both at the administrative level (companies are required to accept and process the leave) and when it comes to changing social norms (for instance, more and more coworkers or friends have become fathers and have taken their full amount of paternity leave). There is evidence that coworker behavior is important in explaining the utilization of programs such as paternity leave (Dahl et al., 2014).

The limited public investment in early childhood education and care in Spain may also drive leave-taking patterns. With public spending on family and child benefits for children aged 0-3 at just 1.6% of GDP in 2020—well below the EU-27 average of 2.5% (Hupkau and Ruiz-Valenzuela, 2023)—families may rely more heavily on maternity, paternity and other parental leave entitlements to manage childcare during their child's early years.

Based on our results, we conclude that the extensions of paternity leave have been quite successful, as reflected in their high acceptance by the majority of society, and as evidenced by administrative data on their utilization. Furthermore, when compared to international evidence, a significant part of this success appears to stem from the system of incentives established by the law. These include the mandatory initial period, the exclusivity of weeks reserved specifically for fathers, and the generous subsidy provided. Additionally, the relatively short duration of maternity leave in Spain, compared to international standards, suggests that paternity leave may be addressing a broader parental demand for delaying the transition to formal childcare or informal, non-parental care arrangements.

To date, there is little evidence regarding the impact of these recent extensions on gender equality in the labor market and co-responsibility in childcare and housework. Gorjón and Lizarraga (2024) offer a first analysis of the effects of the most recent extension (in

2021). They show that men who had children after the extension of leave to 16 weeks are less likely to be working 12 months after the birth of the child. They also find a reduction in the number of days worked in the 12 months after childbirth. However, mothers who gave birth after January 1st, 2021, also reduced the likelihood of being at work at 12 months after the birth of the child, compared to mothers just prior to the latest extension.

Besides the impact on labor market outcomes, increased paternity leave can also impact children. For a reform in Sweden that increased earmarked paternity leave, Avdic et al. (2023) show that the reform decreased average school-leaving grade point averages of sons of non-college fathers by 0.07 standard deviations and increased inter-generational persistence of human capital by 30%, which they attribute to increased separations and a lack of subsitutability of parents' time inputs. Using a differences-in-discontinuities regression design, Farré et al. (2024) find that increased paternity leave eligibility in Spain led to a 12 percentage point higher likelihood of developmental delays among children of eligible fathers compared to non-eligible counterparts. These effects seem to stem from reduced use of formal childcare and the limited substitutability of mothers' and fathers' time. A recent study by González et al. (2024) sheds light on why fathers time may not be as valuable as that of mothers. They show that during the exact dates of the Qatar World Cup (November 20-December 18, 2022), there was a daily excess of more than 1,000 men on paternity leave (1.3%), relative to the surrounding dates, and using the year before and after as controls (for seasonality).

It is worth noting that most of the existing studies detect contemporaneous changes in parental behavior. However, we will have to wait some time before we can investigate the impact of these measures on the division of labor inside and outside the home in the long run. There is growing evidence suggesting that the introduction of paternity leave may have long-term effects on gender equality. For example, Farré et al. (2023) and Fontenay and González (2024) show that reforms that increase the length of paternity leave can lead to changes in gender norms. Using data for Spain and several countries, respectively, they find that children born after different reforms that increased the duration of paternity leave show more gender-egalitarian attitudes and have less stereotypical social norms. They are also more likely to adopt everyday behaviors contrary to gender stereotypes and

choose traditionally female careers, such as education or healthcare.

The effect of increased paternity leave may not be homogeneous across all families. González and Zoabi (2021), for instance, show that earmarked leave for fathers can break traditional specialization agreements in couples with an intermediate gender gap in wages between the spouses, while it may have zero effects in couples with low or high wage gaps. In the case of couples with intermediate wage gaps, their results suggest that paternity leave pushes some couples to become more egalitarian, with women working more and men sharing childcare. Thus, more generous paternity leave policies have the potential to be an instrumental tool in promoting gender equality.

Finally, aligning the duration of paternity leave with that of maternity leave may also influence employers' expectations regarding differences between fathers and mothers in terms of leave length, reduced working hours, or even the likelihood of leaving employment after childbirth. In turn, this adjustment could mitigate the child penalty experienced by mothers and help narrow the gender gap associated with childbearing.

7   Conclusions

Our analysis demonstrates that the extensions of paternity leave in Spain had a strong positive effect on utilization, both at the extensive and intensive margin. Several key features of the policy design appear to underpin the results. First, the mandatory nature of the initial weeks of leave ensures near-universal take-up among fathers. Second, the exclusivity and non-transferability of the leave, reserving a full 16 weeks specifically for fathers, generates strong incentives for individual uptake, particularly in a context where maternity leave remains comparatively short by international standards. Third, the generous compensation levels, with full wage replacement up to a high cap and exemption from income tax, render the policy financially attractive for the vast majority of the workforce.

A notable trend emerging from the data is the steady increase in the proportion of fathers opting to split their leave rather than taking it entirely concurrently with the mother. By 2023, more than half of all fathers had chosen to divide their leave into at least two periods, typically taking the initial period in accordance with the mandatory weeks and

deferring the remaining weeks to a later stage. When leave is not taken simultaneously with mothers, fathers are likely to spend several weeks as the sole caregiver, potentially fostering a more balanced distribution of caregiving responsibilities within the household.

Further heterogeneity analysis underscores the relevance of both employee and employer characteristics in shaping leave-taking behavior. While the total duration of paternity leave exhibits minimal variation across regions, sectors, and demographic groups, substantial differences emerge in fathers' decisions to split their leave. Fathers employed in less flexible sectors, such as accommodation and food services or construction, are significantly less likely to make use of the split option. Conversely, fathers in sectors characterized by higher flexibility, including professional and scientific activities or public administration, display a markedly higher propensity to split their leave. In addition, a strong income gradient is evident: fathers in the highest income quartile are 32 percentage points more likely to split their leave compared to those in the lowest quartile.

Taken together, our findings suggest that the combination of a well-designed policy framework and favorable workplace conditions may contribute to promoting a more equitable distribution of childcare responsibilities, thus potentially advancing progress toward greater gender equality.

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Tables

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Table 1
Maternity and paternity leave regulations in Spain

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Period	Maternity leave	Paternity leave	Pay
Before 24 March 2007	**16 weeks**, 6 first weeks mandatory right after birth, **10 remaining weeks can be shared with father**	no paternity leave	100% of salary (mothers) up to 2,996.10€
From 24 March 2007	**16 weeks**, 6 first weeks mandatory right after birth, **10 remaining weeks can be shared with father**	**2 weeks**, must be taken at once, any time before the end of 16 weeks of maternity leave, **cannot be shared with mother**	100% of salary up to 3,642.00€
From 1 Jan 2017	**16 weeks**, 6 first weeks mandatory right after birth, **10 remaining weeks can be shared with father**	**4 weeks**, must be taken at once, any time before the end of 16 weeks of maternity leave, **cannot be shared with mother**	100% of salary up to 3751.20€.
From 5 Jul 2018	**16 weeks**, 6 first weeks mandatory right after birth, **10 remaining weeks can be shared with father**	**5 weeks**, 4 of which must be taken at once any time before the end of 16 weeks of maternity leave, last week can be taken at different time and either full- or part-time*, any time before child turns 9 months, **cannot be shared with mother**	100% of salary up to 3,803.70€
From 1 Apr 2019	**16 weeks**, 6 first weeks mandatory right after birth, **4 weeks can be shared with father**	**8 weeks**, 2 weeks mandatory** and immediately after birth, the remainder at any time before child turns 12 months, can be taken full- or part-time; **4 weeks can be shared with mother**	100% of salary up to 4,070.10€
From 1 Jan 2020	**16 weeks**, 6 first weeks mandatory right after birth, **2 weeks can be shared with father**	**12 weeks**, 4 weeks mandatory and immediately after birth, the remainder at any time before child turns 12 months, can be taken full- or part-time; **2 weeks can be shared with mother**	100% of salary up to 4,070.10€
From 1 Jan 2021	**16 weeks**, 6 first weeks mandatory right after birth, **cannot be shared with father**	**16 weeks**, 6 weeks mandatory and immediately after birth, the remainder at any time before child turns 12 months, can be taken full- or part-time; **cannot be shared with mother**	100% of salary up to 4,070.10€

Source: Boletin Oficial de Estado (2007, 2009, 2018, 2019).
Notes: *Until 5 July 2018, paternity leave had to be taken at once and could not be split and taken at different time periods. **Paternity leave for fathers became mandatory in 2019 with Royal Decree-Law 6/2019, of March 1, on urgent measures to guarantee equal treatment and opportunities between women and men in employment and occupation, which came into force on April 1, 2019.

Table 2
Effect of paternity leave reforms on participation rates

	(1) 2017	(2) 2018	(3) 2019	(4) 2020	(5) 2021
Post	-0.021	-0.019	0.008	0.001	0.010
	(0.036)	(0.033)	(0.027)	(0.007)	(0.008)
Male	-0.175***	-0.137***	-0.089***	0.043***	0.078***
	(0.022)	(0.020)	(0.017)	(0.004)	(0.005)
Post × Male	0.099**	-0.013	0.200***	0.014*	0.002
	(0.031)	(0.029)	(0.023)	(0.006)	(0.007)
Pre-reform mean (females)	0.64	0.65	0.65	0.64	0.62
Pre-reform mean (males)	0.46	0.51	0.55	0.69	0.70
Adjusted R^2	0.537	0.549	0.648	0.705	0.832
Observations	113	108	110	120	120

Notes: The table shows estimates of Equation 4. The outcome variable (participation rate) is defined as in Equation 1 and constructed as the total number of leave permits taken by day (from administrative records) divided by the total number of birth on the same day (from INE (2024)). All specifications use data for +/- 1 month around the reform cut-off for the respective reform and exclude the day immediately before and of each reform, and days where the estimated participation rate is above one. Specifications control for week-day fixed effects and a linear time trend. Significance levels are indicated by * < .1, ** < .05, *** < .01.

Table 3
Paternity leave extensions and leave take-up

	Total leave (weeks)		Splits leave	
	(1)	(2)	(3)	(4)
PostReform$_{2017}$	-0.005	-0.010^{**}	0.000	0.000
	(0.004)	(0.004)	(0.000)	(0.000)
PostReform$_{2017}\times$ Male	1.895^{***}	1.904^{***}	0.000	0.000
	(0.005)	(0.006)	(0.000)	(0.000)
Mean dep. var.	1.97	1.97	0.00	0.00
SD dep. var.	0.36	0.37	0.00	0.00
Obs.	326,217	297,146	326,217	297,146.00
PostReform$_{2018}$	0.009^{**}	0.015^{***}	0.000^{***}	0.000
	(0.004)	(0.004)	(0.000)	(0.000)
PostReform$_{2018}\times$ Male	0.324^{***}	0.314^{***}	0.000	0.000
	(0.006)	(0.006)	(0.000)	(0.000)
Mean dep. var.	4.06	4.07	0.00	0.00
SD dep. var.	0.77	0.78	0.00	0.00
Obs.	315,405	286,566	315,405	286,566.00
PostReform$_{2019}$	0.022^{***}	0.016^{***}	0.014^{***}	0.015^{***}
	(0.004)	(0.004)	(0.000)	(0.000)
PostReform$_{2019}\times$ Male	2.630^{***}	2.625^{***}	0.291^{***}	0.300^{***}
	(0.008)	(0.009)	(0.002)	(0.002)
Mean dep. var.	4.41	4.40	0.00	0.00
SD dep. var.	0.60	0.60	0.01	0.01
Obs.	318,073	288,640	318,073	288,640.00
PostReform$_{2020}$	0.025^{***}	0.018^{***}	0.012^{***}	0.010^{***}
	(0.003)	(0.003)	(0.001)	(0.001)
PostReform$_{2020}\times$ Male	4.032^{***}	4.038^{***}	0.070^{***}	0.075^{***}
	(0.010)	(0.010)	(0.003)	(0.003)
Mean dep. var.	7.57	7.55	0.39	0.40
SD dep. var.	1.85	1.89	0.49	0.49
Obs.	314,622	282,977	314,622	282,977.00
PostReform$_{2021}$	-0.010^{***}	-0.018^{***}	0.010^{***}	0.004^{***}
	(0.003)	(0.003)	(0.001)	(0.001)
PostReform$_{2021}\times$ Male	3.794^{***}	3.802^{***}	0.039^{***}	0.038^{***}
	(0.012)	(0.013)	(0.003)	(0.003)
Mean dep. var.	11.57	11.56	0.46	0.48
SD dep. var.	2.01	2.04	0.50	0.50
Obs.	291,009	264,407	291,009	264,407.00
Controls	No	Yes	No	Yes

Notes: Individual level administrative data on all paternity leave permits processed for births occurring between July 2016 and June 2021, for individuals employed in the general regime (excluding self-employed). The data exclude parents with multiple births. Significance levels are indicated by * < .1, ** < .05, *** < .01. DD estimates following Equation 5. All specifications use a data for +/- 6 months around the reform cut-off for the respective reform. Control variables in Columns (2) and (4) include region dummies, sector of economic activity dummies, age range dummies, and quartile of income dummies. Robust standard errors clustered at the individual level. Means and standard deviations of the outcome variable are calculated for males for births occurring before the respective cut-off dates.

Table 4
Paternity leave take-up by region

	(1) Total leave (weeks)	(2) Splits leave
Andalusia	0.012	-0.074***
	(0.018)	(0.004)
Aragon	0.055	0.088***
	(0.032)	(0.007)
Asturias	-0.062	-0.006
	(0.045)	(0.010)
Balearic Islands	-0.031	0.005
	(0.035)	(0.007)
Canary Islands	0.046	-0.104***
	(0.031)	(0.007)
Cantabria	-0.002	0.017
	(0.052)	(0.011)
Castile and Leon	0.029	0.084***
	(0.028)	(0.006)
Castile-La Mancha	-0.149***	0.008
	(0.028)	(0.006)
Catalonia	0.111***	-0.012***
	(0.017)	(0.004)
Valencian community	0.046*	-0.027***
	(0.021)	(0.004)
Extremadura	-0.263***	-0.008
	(0.041)	(0.009)
Galicia	0.001	0.015*
	(0.028)	(0.006)
Murcia	-0.141***	-0.021**
	(0.031)	(0.007)
Navarre	0.133**	0.068***
	(0.044)	(0.009)
Basque Country	0.178***	0.071***
	(0.027)	(0.006)
La Rioja	0.018	0.075***
	(0.062)	(0.013)
Mean dep. var.	15.51	0.56
SD dep. var.	2.19	0.50
N	179036	179036

Notes: Individual level administrative data on all paternity leave permits processed for births occurring in 2022, for individuals employed in the general regime (excluding self-employed). The data exclude parents with multiple births. Coefficient estimates shown come from a regression of the outcome variable on autonomous community dummies (omitted category: Madrid), including controls for sector of activity, age range and income quartile dummies. Means and SD of the outcome variable are calculated across the whole regression sample. Significance levels are indicated by * < .05, ** < .01, *** < .001.

Table 5
Paternity leave take-up by sector of activity

	(1) Total leave (weeks)	(2) Splits leave
Agriculture, forestry and fishing	-0.254***	-0.059***
	(0.056)	(0.012)
Mining and quarrying	-0.234*	-0.038
	(0.113)	(0.024)
Electricity, gas, etc.	0.018	0.097***
	(0.078)	(0.017)
Water supply, sewage, waste mgmt, etc.	-0.058	-0.059***
	(0.048)	(0.010)
Construction	-0.262***	-0.113***
	(0.020)	(0.004)
Wholesale and retail trade	-0.178***	-0.014***
	(0.017)	(0.004)
Transportation and storage	-0.298***	-0.042***
	(0.023)	(0.005)
Accommodation and food service	-0.112***	-0.118***
	(0.025)	(0.005)
Information and Communication	0.059*	0.079***
	(0.025)	(0.005)
Finance and insurance	-0.238***	0.016*
	(0.038)	(0.008)
Real estate	-0.542***	-0.067***
	(0.072)	(0.016)
Professional, scientific and technical activities	-0.118***	0.058***
	(0.025)	(0.005)
Administrative and support services	-0.029	-0.073***
	(0.023)	(0.005)
Public administration, defence, etc.	0.136***	0.046***
	(0.030)	(0.006)
Education	-0.043	0.008
	(0.029)	(0.006)
Human Health and social work	0.126***	0.000
	(0.027)	(0.006)
Arts, entertainment, etc.	-0.271***	0.010
	(0.048)	(0.010)
Other services	-0.072	-0.029**
	(0.047)	(0.010)
Mean dep. var.	15.51	0.56
SD dep. var.	2.19	0.50
N	179036	179036

Notes: Individual level administrative data on all paternity leave permits processed for births occurring in 2022, for individuals employed in the general regime (excluding self-employed). The data exclude parents with multiple births. Coefficient estimates shown come from a regression of the outcome variable on sector of activity dummies (omitted category: manufacturing), including controls for autonomous community, age range and income quartile dummies. Means and SD of the outcome variable are calculated across the whole regression sample. Significance levels are indicated by * < .05, ** < .01, *** < .001.

Table 6
Paternity leave take up by father's age and income quartile

	(1)	(2)
	Total leave (weeks)	Splits leave
Age: 16-25	-0.279***	-0.123***
	(0.030)	(0.007)
Age: 36-45	0.014	0.028***
	(0.011)	(0.002)
Age: 46-55	-0.161***	-0.035***
	(0.024)	(0.005)
Q2 Income	0.351***	0.059***
	(0.027)	(0.006)
Q3 Income	0.539***	0.182***
	(0.027)	(0.006)
Q4 income	0.489***	0.320***
	(0.028)	(0.006)
Mean dep. var.	15.51	0.56
SD dep. var.	2.19	0.50
N	179036	179036

Notes: Individual level administrative data on all paternity leave permits processed for all births occurring in 2022, for individuals employed in the general regime (excluding self-employed). The data exclude parents with multiple births. Coefficient estimates shown come from a regression of the outcome variable on father's age range and income quartile dummies (omitted categories: 1st income quartile and father's age range 26-35), including controls for sector of activity, and autonomous community dummies. Means and SD of the outcome variable are calculated across the the whole regression sample. Significance levels are indicated by * $< .05$, ** $< .01$, *** $< .001$.
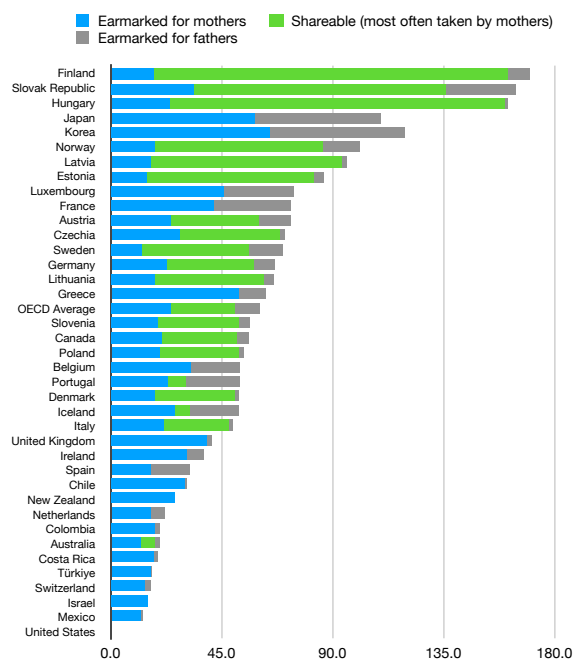
Figures

Figure 1
Reserved and shareable paid family leave entitlements

Source: OECD Gender equality and work, available at: https://www.oecd.org/en/topics/gender-equality-and-work.html.

Notes: The figure shows the duration of earmarked and shareable paid family leave entitlements, in weeks. Paid birth-related leave entitlements to care for young children in place as of April 2022, such as maternity-, paternity-, home care- and parental leave. Periods labeled "earmarked for mothers" and "earmarked for fathers" refer to individual non-transferable entitlements for paid employment-protected leave of absence for employed parents. Weeks of shareable leave refer to parental- and home care leave entitlements that can be freely shared between mothers and fathers. For Japan, the individual parental leave entitlements for the mother must be used simultaneously with the father if both parents are to use the entirety of their entitlement.

Figure 2
Paternity and maternity leave in Spain (in weeks)
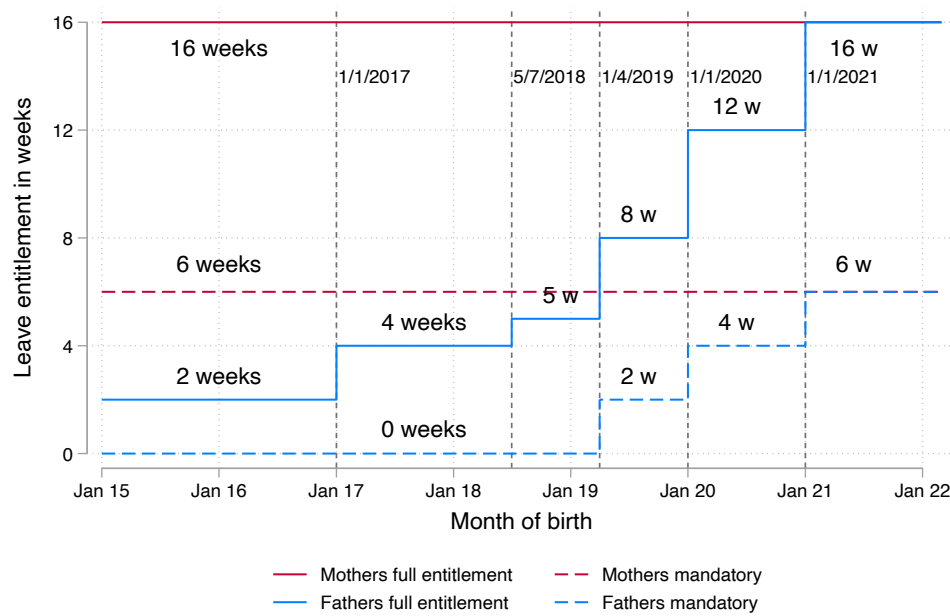
Notes: Authors' own elaboration. The figure summarizes the main legislative changes to paternity leave length in Spain over time (see Table 1). Reform dates are indicated by vertical dashed lines.

Figure 3
Participation rate in maternity and paternity leave over time

(a) Weekly participation rate
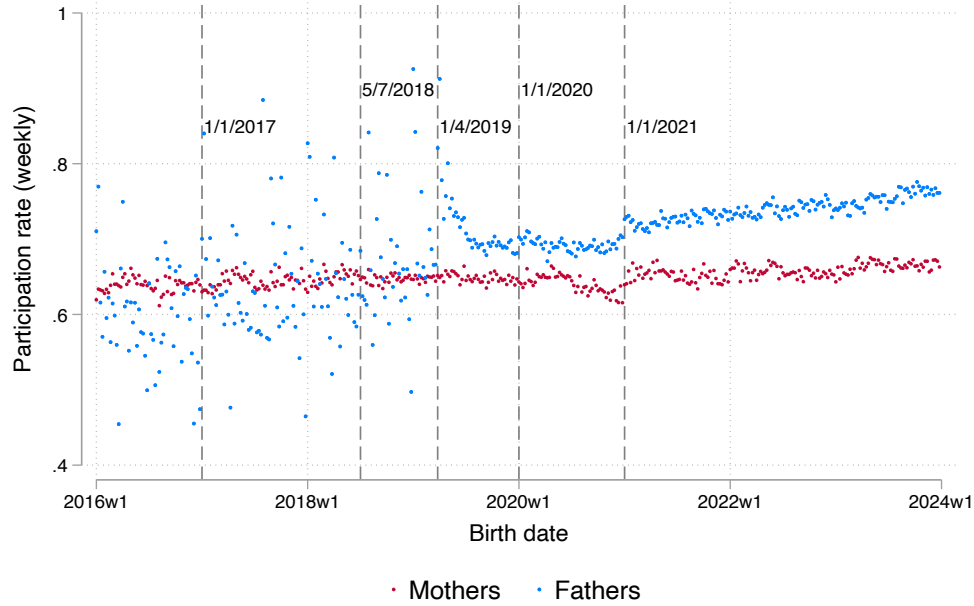
(b) Yearly participation rate
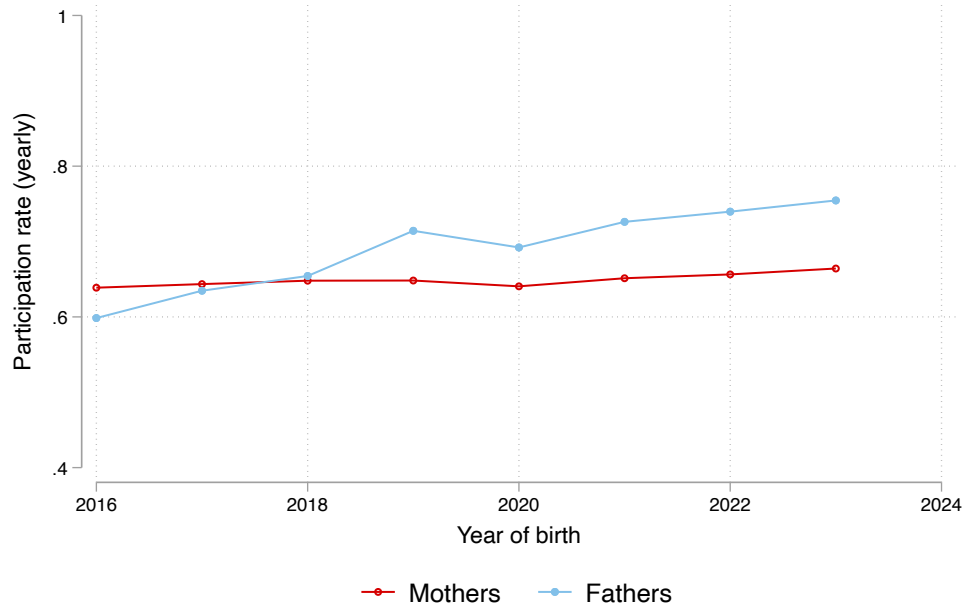
Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* and data on births from INE (2024). The graph plots the weekly (Panel a) and yearly (Panel b) participation rate in maternity/paternity leave, calculated as the number of leave permits taken per week (year) divided by the number of births in that week (year).

Figure 4
Average length of maternity and paternity leave
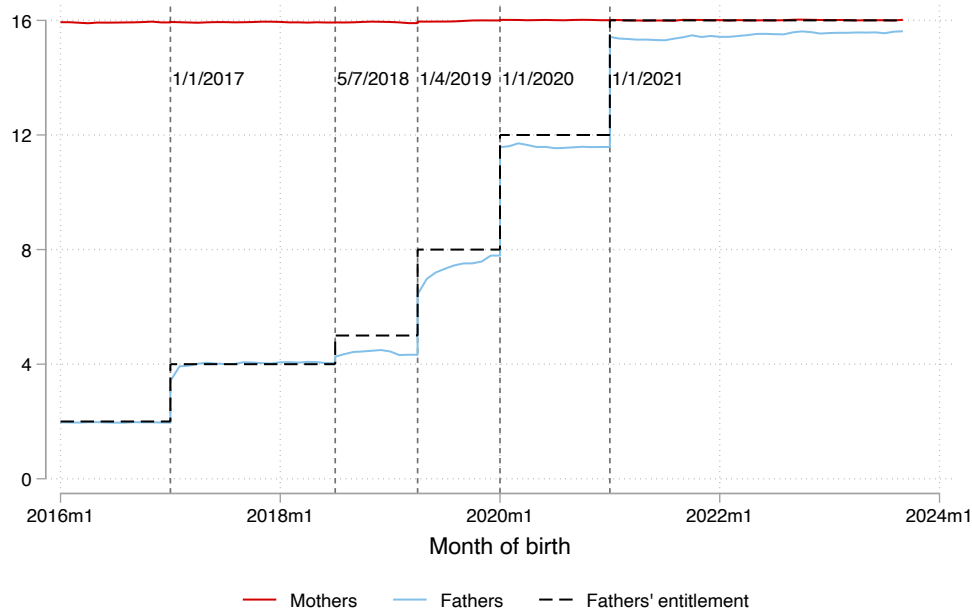
Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social*. Sample includes all employed workers (general regime) and excludes parents with multiple births. The vertical dotted lines indicate the entry into force of the different extensions of paternity leave (see Table 1).

Figure 5
Participation rates by reform (2017–2021)
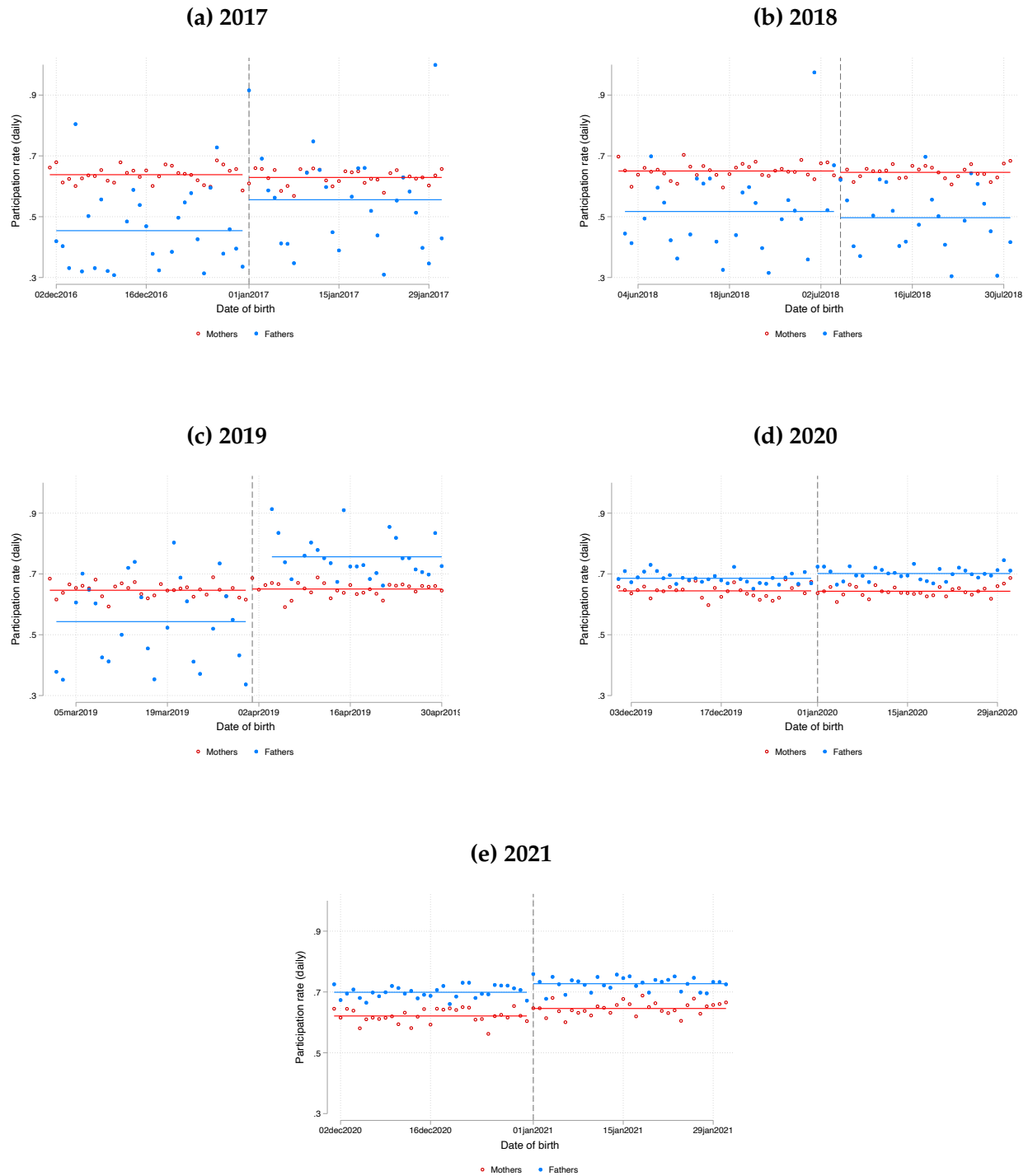
(a) 2017

(b) 2018

(c) 2019

(d) 2020

(e) 2021

Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* for births between 2016 and 2021. Sample includes all employed workers (general regime) and excludes parents with multiple births. The figure plots weekly participation rates (calculated as the number of paternity leave permits commenced on a given day divided by the number of birth on the same day). The horizontal lines represent averages by gender for pre- and post-reform periods. The dashed vertical lines indicate the reform dates. The graphs exclude outliers (daily participation rates > 1), of which there are 7 observations for fathers around the 2017 reform, 10 around the 2018 reform, and 9 around the 2019 reform. There are no outliers for mothers.

Figure 6
Percentage of fathers and mothers who split their leave
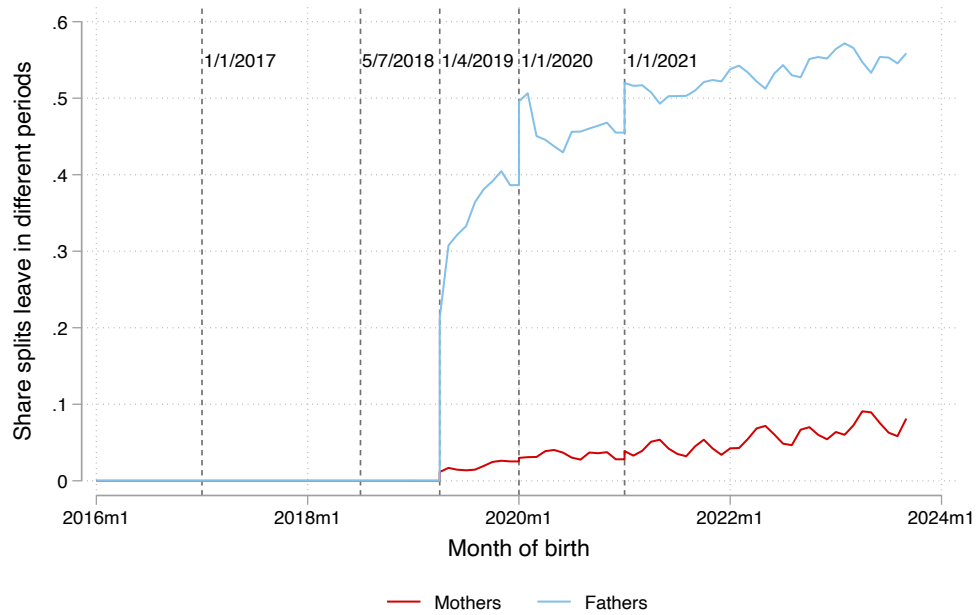
Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* for births in September 2023. Sample includes all employed workers (general regime) and excludes parents with multiple births. The vertical dotted lines indicate the entry into force of the different extensions of paternity leave (see Table 1).

Figure 7
Average length of initial and subsequent paternity leave - splitters only

Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* for births in September 2023. Sample includes all employed workers (general regime) and excludes parents with multiple births. Additionally, the sample is restricted to fathers who split their leave into at least two separate periods. The vertical dotted lines indicate the entry into force of the different extensions of paternity leave (see Table 1).

Figure 8
Paternity leave taken simultaneously with maternity leave

(a) Whole sample

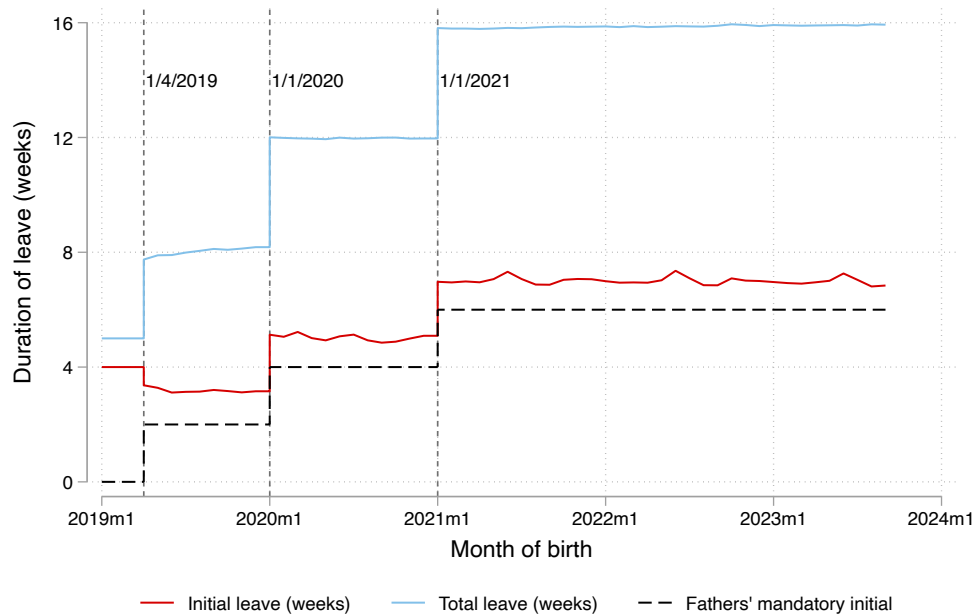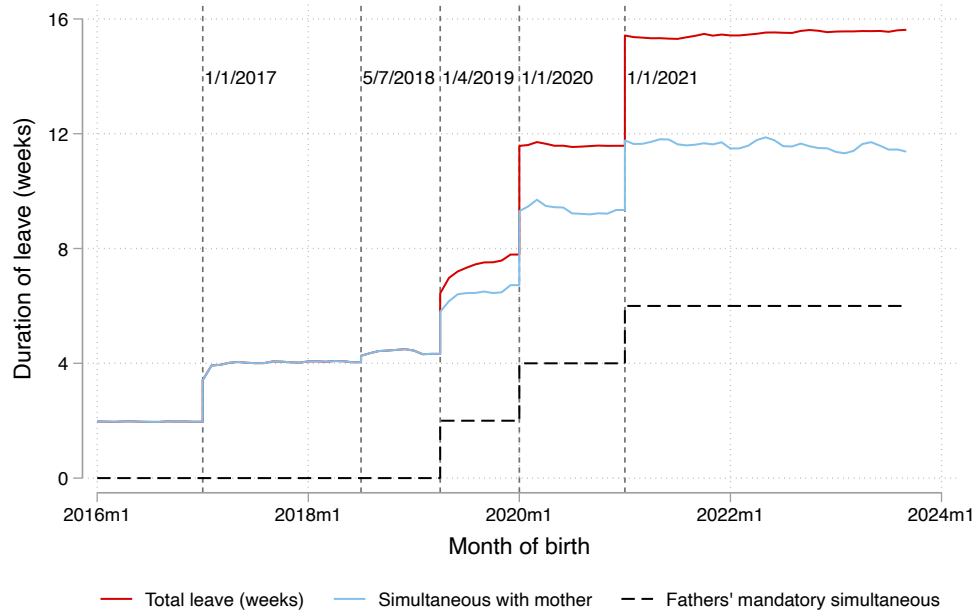### (b) Only father who split leave
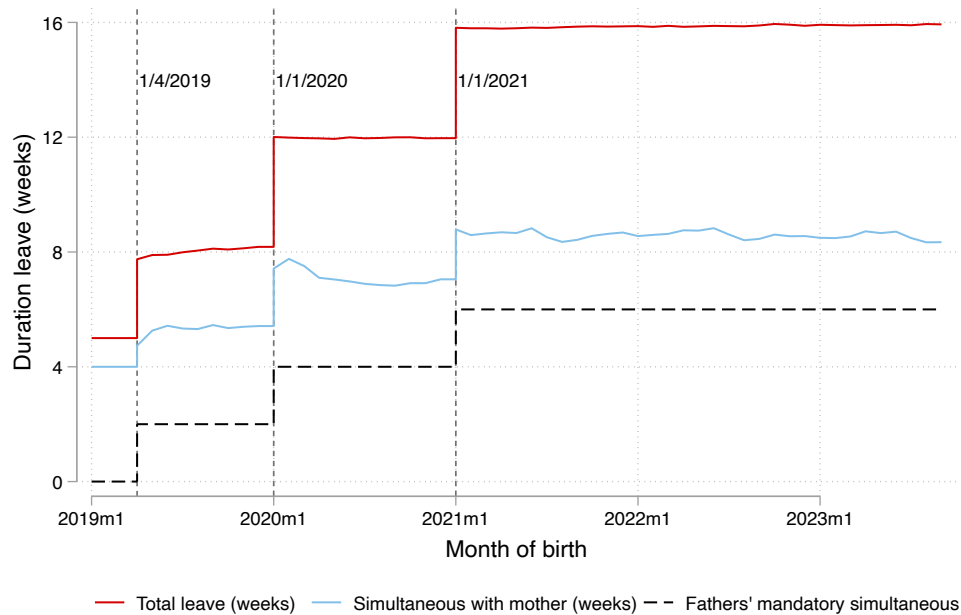
Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* for births in September 2023. Sample includes all employed workers (general regime) and excludes parents with multiple births. The vertical dotted lines indicate the entry into force of the different extensions of paternity leave (see Table 1).

Figure 9
Heterogeneity in paternity leave duration

Leave duration (weeks)

Extremadura	○ 15.2
Murcia	○ 15.3
Castile-La Mancha	○ 15.4
Balearic Islands	○ 15.4
Asturias	○ 15.5
Canary Islands	○ 15.5
Andalusia	○ 15.5
Madrid	○ 15.5
Galicia	○ 15.5
Cantabria	○ 15.5
La Rioja	○ 15.5
Castile and Leon	○ 15.5
Valencian Community	○ 15.5
Aragon	○ 15.6
Catalonia	○ 15.6
Navarre	○ 15.7
Basque Country	○ 15.7

(a) by Autonomous Community

Leave duration (weeks)

Real estate	○ 15.1
Arts, entertaiment, etc.	○ 15.3
Transportation and storage	○ 15.3
Agriculture, forestry and fishin	○ 15.3
Construction	○ 15.4
Mining and quarrying	○ 15.4
Accommodation and food service	○ 15.4
Wholesale and retail trade	○ 15.4
Finance and insurance	○ 15.4
Other services	○ 15.5
Administrative and support servi	○ 15.5
Professional, scientific and tec	○ 15.5
Water supply, sewage, waste mgmt	○ 15.6
Education	○ 15.6
Manufacturing	○ 15.6
Electricity, gas, etc.	○ 15.7
Information and Communication	○ 15.7
Human Health and social work	○ 15.8
Public administration, defence,	○ 15.8

(b) by sector of activity

Leave duration (weeks)

16-25	○ 15.2
26-35	○ 15.5
36-45	○ 15.6
46-55	○ 15.4
56-65	○ 15.1

(c) by age range

Leave duration (weeks)

Q1	○ 15.0
Q2	○ 15.4
Q3	○ 15.6
Q4	○ 15.6

(d) by income quartile

Notes: Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* for paternity leave permits associated with births in 2022. Sample includes all employed workers (general regime) and excludes parents with multiple births.

Figure 10
Heterogeneity in splitting of paternity leave

Share splits leave in different periods

Canary Islands	0.37
Andalusia	0.44
Murcia	0.49
Extremadura	0.49
Valencian Community	0.50
Balearic Islands	0.52
Castile-La Mancha	0.53
Galicia	0.54
Catalonia	0.55
Asturias	0.56
Cantabria	0.57
Madrid	0.59
La Rioja	0.62
Castile and Leon	0.63
Aragon	0.64
Navarre	0.67
Basque Country	0.68

(a) by Autonomous Community

Share splits leave in different periods

Accommodation and food service	0.35
Construction	0.43
Administrative and support servi	0.45
Agriculture, forestry and fishin	0.47
Other services	0.49
Transportation and storage	0.51
Real estate	0.52
Water supply, sewage, waste mgmt	0.53
Wholesale and retail trade	0.53
Arts, entertaiment, etc.	0.53
Mining and quarrying	0.59
Manufacturing	0.61
Human Health and social work	0.62
Education	0.64
Public administration, defence,	0.70
Professional, scientific and tec	0.70
Finance and insurance	0.72
Information and Communication	0.74
Electricity, gas, etc.	0.80

(b) by sector of activity

Share splits leave in different periods

16-25	0.28
26-35	0.51
36-45	0.58
46-55	0.49
56-65	0.38

(c) by age range

Share splits leave in different periods

Q1	0.30
Q2	0.37
Q3	0.53
Q4	0.73

(d) by income quartile

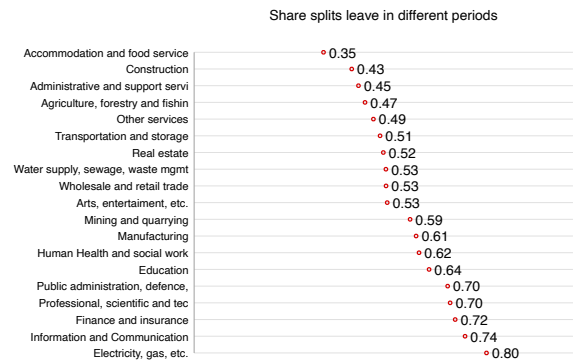*Notes:* Authors' calculations using microdata from the *Oficina del Dato de la Seguridad Social* for paternity leave permits associated with births in 2022. Sample includes all employed workers (general regime) and excludes parents with multiple births.
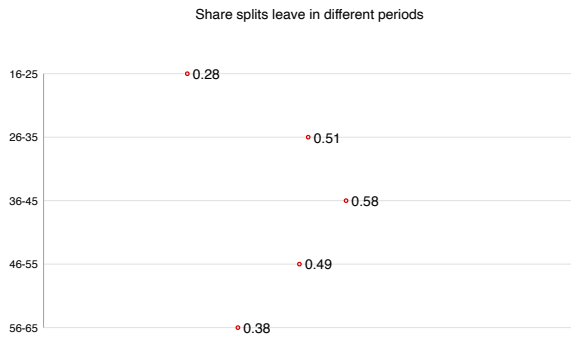
Online Appendix

Table A1

Effect of paternity leave reforms on participation rates - full sample

	(1) 2017	(2) 2018	(3) 2019	(4) 2020	(5) 2021
Post	0.085	0.003	0.133	-0.002	0.016*
	(0.083)	(0.067)	(0.070)	(0.007)	(0.008)
Male	-0.106*	-0.011	0.009	0.041***	0.078***
	(0.052)	(0.040)	(0.044)	(0.004)	(0.005)
Post $\times$ Male	0.160*	-0.030	0.173**	0.017**	0.003
	(0.074)	(0.060)	(0.063)	(0.006)	(0.007)
Pre-reform mean (females)	0.64	0.65	0.65	0.64	0.62
Pre-reform mean (males)	0.53	0.64	0.66	0.69	0.70
Adjusted R^2	0.328	0.372	0.363	0.696	0.828
Observations	124	122	122	124	124

Notes: Outcome variable (participation rate) as defined in Equation 1 is constructed as the total number of leave permits taken by day (from administrative records) divided by the total number of daily births (from INE (2024)). Table shows estimates from Equation 4. All specifications use data for +/- 1 month around the reform cut-off for the respective reform. Specifications control for weekday fixed effects and a linear time trend. Significance levels are indicated by * < .1, ** < .05, *** < .01.

Table A2

Effect of paternity leave reforms on participation rates - RD-DiD specification

	(1) 2017	(2) 2018	(3) 2019	(4) 2020	(5) 2021
Post	-0.020	-0.021	0.002	-0.002	0.010
	(0.026)	(0.022)	(0.022)	(0.011)	(0.012)
Male	-0.158**	-0.115	-0.064	0.037**	0.086***
	(0.050)	(0.084)	(0.042)	(0.012)	(0.012)
Post $\times$ Male	0.097	0.000	0.220***	0.021	0.003
	(0.071)	(0.089)	(0.049)	(0.015)	(0.015)
Pre-reform mean (females)	0.64	0.65	0.65	0.64	0.62
Pre-reform mean (males)	0.46	0.51	0.55	0.69	0.70
Adjusted R^2	0.524	0.543	0.648	0.716	0.830
Observations	113	108	110	120	120

Notes: Outcome variable (participation rate) as defined in Equation 1 is constructed as the total number of leave permits taken by day (from administrative records) divided by the total number of daily births (from INE (2024)). Table shows estimates from the RD-DiD Equation specified in footnote 9. All specifications use data for +/- 1 months around the reform cut-off for the respective reform and exclude the day immediately before and after each reform and days where the estimated participation rate is above one. Significance levels are indicated by * < .1, ** < .05, *** < .01.