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# The impact of equal parenting time laws on family outcomes and risky behavior by teenagers: Evidence from Spain

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## ABSTRACT

Due to legal reforms, equal parenting time (EPT) laws in Spain now apply to approximately 40% of all divorces, with likely implications for family outcomes and teenagers' risky behavior. Consistent with theories of bargaining power within marriage, we find that EPT laws decrease contentious and wife-initiated divorces and increase the employment of mothers relative to fathers. An analysis of drug use and family relationships, among 165,000 teenagers, further shows that EPT laws significantly decrease risky behavior by teenagers, especially boys, who claim to have better relationships with their father, although more unclear norms for behavior. These results have some international implications, such as for the United States, where more than half of the states are considering whether to adopt EPT laws.

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## 1. Introduction

Shared parenting or joint physical custody, a parental care arrangement in which a child lives with each parent about equally after separation or divorce, is an increasingly common phenomenon in many Western countries.<sup>1</sup> This has led to a vivid debate about the consequences of shared parenting for children and parents. Supporters cite alienated fathers who get little time with their children but suffer under burdensome child support obligations. Sociology and psychology research shows that children who have frequent contact with both parents usually perform better on various indicators (for a review, see Nielsen, 2018). Critics instead argue that limiting courts' discretion can reduce protections against abusive or control-ling former spouses, and some new laws could encourage fathers to request equal parenting time (EPT hereafter) simply to

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<sup>&</sup>lt;sup>1</sup> We use joint physical custody, equal parenting time and shared parenting synonymously, though the two latter terms may be regarded as more restrictive than the former. Joint legal custody instead implies that both parents share the obligations and rights to make decisions that affect children's well-being, such as school choices, but without implications of the physical custody of the child. When one parent's time with the child, including overnight stays, exceeds 35-40%, it is usually referred to as shared parenting.

reduce their child support obligations, with no intention or availability to use extra time with their children for the children's benefit.

An empirical analysis of shared parenting and its consequences is difficult for multiple reasons. First and foremost, parents of children under joint physical custody tend to be highly educated, with closer ties to their children pre-divorce and show more agreeableness or less conflict in their relationship with the other parent (Nielsen, 2018 and Steinbach, 2019). This positive selection of high-quality parents into shared parenting makes it difficult to draw conclusions about the causal effects of this type of custody on the wellbeing of children as any positive association between shared parenting and child outcomes might simply reflect the positive impact of good parenting styles.

A frequent and well-known solution to this problem in the economics literature is to find exogenous sources of variation in custody types, often by exploiting the different timing of pro shared parenting legal reforms in different jurisdictions. This strategy, however, presents its own challenges. First, in legal and non-legal writings very often there is no explicit distinction between joint legal custody and joint physical custody, and the term joint custody is often used to denote either one or both types of custody. But even when laws mention joint physical custody or shared parenting explicitly, whether they truly promote shared parenting or not depends on the details of the laws, which can be difficult to assess or might be simply overlooked. Moreover, there are a range of types of custody laws. While some custody laws do not allow for shared parenting and others have a presumption of joint physical custody, there exists a continuum of legal support for joint physical custody between these two extremes, making the identification of 'friendly' vs. 'un-friendly' shared parenting regimes sometimes difficult.

As an example of the above, during the 1980s and 1990s, many U.S. states passed pro-joint custody laws, guided by the "best interest of the child" standard. Because these laws allowed but rarely required EPT of children after divorces, judges' discretion and parents' disagreements have created a situation in which EPT or joint physical custody remain low in the United States. Although there are no official statistics of the prevalence of shared parenting in the United States, several independent sources yield an incidence rate of around 25% that has remained quite stable over the past several decades. For example, according to the U.S. Census Bureau, only 25% of the 12.9 million custodial parents in 2017 had joint (legal or physical) custody of their children. Using micro-level divorce certificate data from the National Vital Statistics, Halla (2013) finds that joint physical custody (defined as a minimum of 30% time share with each parent) applies to 25% of all divorces in the period between 1989 and 1995. Finally, using the 2014 Annual Social and Economic Supplement sample of the CPS, 23.45% of all cases with a child support agreement were awarded joint physical custody of the children (defined as a minimum of 40% time share with each parent).

The low and stagnant incidence of shared parenting in the United States may be due to issues of emphasis in many of the statues that regulate the custody of children after divorce, with some statutes permitting but not directly promoting shared parenting. One assessment of shared parenting laws assigned low scores to 42 states (National Parents Organization NPO, 2019). That assessment looked at the complete language of each state's child custody statutes and found that only nine states' statutes<sup>2</sup> indicated an explicit preference for shared parenting or a rebuttable presumption of shared parenting even when both parents do not agree.<sup>3</sup> It is in this context that in the last 10 years different states considered as many as 86 bills to encourage shared parenting or make it a legal presumption, even when parents disagree. However, of those bills, 52 failed to be passed or were withdrawn, 26 are pending for approval and only 8 were signed into law.

These shifts reflect a more general, global trend. Many European countries also have changed their family laws to promote EPT after divorce, though, as in the US, these laws vary in intensity and emphasis. Some reforms grant judges more discretion if parents disagree about physical custody, so they have had little impact on the incidence of EPT (de Blasio and Vuri, 2013). Others prompted surges in EPT cases. Among these, Spain is a pioneer case where EPT is designated as the preferred type of custody, even if one parent opposes it.

We undertake an empirical study of the impact of EPT laws on divorce-related outcomes, female employment and risky behavior by teenagers, using the natural experiment created by a series of reforms to promote EPT in five Spanish regions, implemented between 2009 and 2011. The new laws established a presumption that EPT is in the best interest of the child, and parents' disagreement was deemed insufficient to deny EPT. In turn, the incidence of EPT increased dramatically, showing a fourfold rise, from 10.3% of all divorces the year before the reforms to roughly 40.0% six years later.<sup>4</sup> These EPT laws had no bearing with the status of joint legal custody, which was already the standard in Spain. This context thus offers an ideal environment in which to study the impact of a drastic move toward EPT after divorce, separate from other changes in custody law. We take advantage of the different timing of the reforms in various regions (diff-in-diff) to identify the unique effect of the new laws.

Our analysis reveals that EPT laws have led to significant increases in the incidence of shared parenting. We also find a decrease of contentious and wife-initiated divorces and an increase of employment among mothers relative to fathers. An analysis of drug use and family relationships, among 165,000 teenagers, further shows that EPT laws significantly decrease risky behavior by teenagers, especially boys, who claim to have better relationships with their father, although more unclear

<sup>&</sup>lt;sup>2</sup> According to the NPO study, the nine states that obtained this good grade are: Kentucky, Arizona, District of Columbia, Iowa, Nevada, Louisiana, Minnesota, South Dakota and Wisconsin.

<sup>&</sup>lt;sup>3</sup> Under a rebuttable presumption, any deviation from a 50/50 split would require clear and convincing evidence that the other parent represents a threat to the child's physical, mental, moral, or emotional health.

<sup>&</sup>lt;sup>4</sup> These data come from the Spanish Council of the Judicial Power and are available at www.ine.es.

norms for behavior. Our results are robust to a battery of tests but are sensitive to the treatment of pre-reform trends. Given that we control for pre-reform trends in all our specifications, we interpret our results as deviations from those trends.

With these insights, this study contributes to extant literature in three main ways. First, we analyze the effects of EPT laws on family outcomes, adding to the literature that investigates joint custody laws, which allow but do not require EPT.<sup>5</sup> Second, moving beyond standard analyses of the relationship between the type of custody and family outcomes, our study provides the first assessment of the effects of EPT laws on teenagers' specific behaviors, including alcohol and drug consumption and their relationships with their parents. Third, as a novel contribution, we use longitudinal data to analyze the employment effects of EPT laws on divorced women and thus control for pre-divorce employment differences between divorced and non-divorced mothers.

Our work is also related to Fernández-Kranz et al. (2020). In that study we investigate the effect of the Spanish EPT laws on the incidence of intimate partner violence. The family outcomes that we analyze in that paper are related to some of the outcomes in this paper. For example, our finding of a decrease of the number of contentious divorces is consistent with the evidence in Fernández-Kranz et al. (2020) showing a decrease of the incidence of intimate partner violence in the Spanish regions that passed EPT laws. Both results are consistent with the idea that EPT laws equalize the bargaining power of the two spouses in a divorce proceeding.

In the next section, we discuss our theoretical considerations in more detail. Section 3 then describes the study context, that is, EPT laws in Spain and legal changes since 2009. After we outline the data in Section 4, we analyze the effects of EPT laws on the incidence of EPT; divorce; female employment; and adolescent behavior in Section 5. In Section 6, we offer some robustness tests, and Section 7 concludes.

## 2. Theoretical considerations

## 2.1. EPT laws and divorce<sup>6</sup>

Similar to general joint custody laws, EPT seemingly increase the bargaining power of men over women (Allen and Brinig, 2011), in that without an EPT assumption, fathers who want equally shared time with their children after divorce often cannot obtain it if the mother disagrees. As a consequence, EPT laws have contrasting effects on men and women, with unclear net effects. For example, EPT lowers the cost of divorce for men, so these laws may increase men's willingness to marry, divorce, have children, and invest in children, whereas the opposite may be true for women (Halla, 2013).

The effect of EPT laws on divorce is further complicated by the interactive effects of changes in other family outcomes. For example, EPT affects the value of marriage through their influences on fertility and child care, so men become more willing to invest in and bond more closely with their children, but women become less so (Brinig and Buckley, 1998). Also, if marriage, versus cohabitation, is a commitment device and a sign of a stable relationship (Brown and Booth, 1996; Cigno, 2012; Masters, 2008), women may be more inclined to rely on it in an environment in which, due to EPT laws, men's willingness to divorce is higher, so the value of men's commitment to a stable relationship is greater. But this may affect the quality of marriages and hence the probability of divorce.

Overall, we posit that even though EPT laws have ambiguous effects on the rate of divorce, they may change its composition. Consistent with the lowering (higher) costs of divorce for men (women), we expect a lower (higher) proportion of wife (husband) initiated divorces. We also expect a decrease of contentious divorces. This is so because EPT laws eliminate the veto power of the mother or the father in a custody dispute and therefore increase the incentives for both parties to reach an agreement and avoid a costly and lengthy judicial process with an uncertain outcome. As argued before, this is consistent with the findings of Fernández-Kranz et al. (2020) showing a decrease of intimate partner violence in the Spanish regions that passed EPT laws.

#### 2.2. Female employment

The effect of EPT laws on the division of labor within the household is a priori ambiguous too. As with divorce rates, the effects depend on changes elicited by EPT laws in other family outcomes. For example, higher divorce rates and EPT laws together may decrease women's incentives to invest in marriage-specific assets, including children, and push them to devote more time to labor market activities. A higher (lower) divorce probability or a lower (higher) transfer from the husband after divorce might prompt greater (lower) employment among married women, as a way to secure their outside options in the event of marital dissolution (Bargain et al., 2012; Lundberg, 2002; Papps, 2006). Additionally, EPT laws could encourage fathers to spend more time with their children, because they anticipate that in the event of a divorce, they will

<sup>&</sup>lt;sup>5</sup> For example, Halla (2013) examines the US joint custody laws of the 1980s and 1990s and finds that the laws had ambiguous effects on divorce, reduced female labor participation rates and increased marriage rates and fertility. Regarding the effects on children, more joint custody appears to raise minors' education levels after a divorce but reduces that of minors in intact families.

<sup>&</sup>lt;sup>6</sup> The empirical section focuses on the effects of EPT laws on divorce rates. The reason for our discussion about marriage and fertility is the interactive effects between these family outcomes and divorce rates.

continue to enjoy the benefits from bonding more closely with the child pre-divorce. In this case, EPT laws could decrease the specialization within the household and increase the employment of mothers relative of fathers.

The empirical literature has so far focused on the US joint custody laws of the 1980s and 1990s and finds conflicting evidence. Halla (2013) and Böheim et al. (2012) find a decrease in female labor market participation rates, whereas Nguyen et al., 2018, Nunley and Seals (2011) and Altindag, Nunley and Seals (2017) show that these laws induced a reallocation of time within marriage, with mothers working more in the market and fathers working more in the home.

For divorced mothers, the effects are less ambiguous: Because the laws increase the incidence of EPT, divorced mothers have more time away from their children, which they can devote to job market activities. They also tend to receive less child support and have a lower probability of retaining the use of the marital house. According to the Becker-Coase theorem (Becker, 1993), these negative economic consequences result from the reduced bargaining power of women in a contentious divorce when EPT is the norm. Therefore, divorced mothers have both the time and the need to engage in more market work when exposed to EPT laws.

#### 2.3. Adolescent behavior

The effects of EPT laws on children also are hard to pinpoint theoretically; they depend on the effects on family outcomes such as marriage, divorce, and investment in children, which we have explained are a priori ambiguous. The outcomes for children also depend on the incentives that drive EPT requests, namely, whether fathers are expressing their true desire to spend more time with their children or else are seeking to reduce their child support obligations. Sharing residences equally likely influences children's emotional stress, depending on whether the lack of stability is outweighed by the benefits of more frequent contacts with both parents (see Turunen, 2017).

Moreover, EPT laws affect outcomes for children in both non-intact and intact families. To the extent that EPT laws increase the bargaining power of men, we can expect a more dominant role of male preferences regarding how to allocate resources to children, in intact and non-intact families. Whether this shift leads to better or worse outcomes for children is not clear (Halla, 2013), because EPT laws tend to increase (decrease) the incentives of men (women) to invest in children (Weiss and Willis, 1985). Finally, the effects on the division of labor within the household and the labor supply of married mothers should have consequences for children of both intact and non-intact families (Roff, 2017).

Various studies note correlations between joint custody and children's emotional and educational outcomes. Although the results vary, a majority of studies indicate that joint custody leads to better emotional and educational outcomes for children (e.g., Nielsen, 2018; Turunen, 2017). Yet this research stream tends to feature very small samples (e.g., fewer than 100 children in joint custody) and cross-sectional comparisons of children in different custody regimes, with no controls for the parents' pre-divorce characteristics. Even when studies control for parents' income or level of conflict, endogeneity issues arise, because heterogeneous parents make different custody decisions. For example, steady contact strengthens parent–child bonds and facilitates parenting styles that encourage child development (Amato and Gilbreth, 1999), which is more frequent among fathers who request EPT (Bastaits et al., 2012). Whether this parenting style results from joint custody or is a trait that preceded the divorce is unknown and difficult to control for.

There are surprisingly very few studies that address such endogeneity concerns. The few that do, investigate the effects of US joint custody laws on children's outcomes and tend to find negative effects. For example, Maiti (2015) finds worse educational and labor market outcomes for children who grew up in U.S. states with joint custody laws, especially boys. Nunley and Seals (2011) find a lower rate of private school attendance of children of intact families in states with joint custody laws. One difference between these two studies and ours is that they focus on the joint custody laws implemented in the United States during the 1980s and 1990s. As explained before, these laws allowed but did not require EPT after divorce.

#### 3. Identification strategy: EPT in spain

In the original formulation of the Spanish Civil Code (CC), the legal custody of children following marriage nullity or separation was granted to both parents (joint *legal* custody),<sup>7</sup> but physical custody was granted exclusively to one, usually the mother. This distinction between legal and physical custody meant that as a general rule, children spent most of their time with their mothers, but both parents shared legal authority over them and had to coordinate important decisions. It was not until Law 15/2005 of July 8, which modified the CC and the Civil Procedure Law on separation and divorce, that the joint *physical* custody of children, or EPT after divorce, was allowed. Although this 2005 law opened the door to EPT, it also required mutual agreement by both parents (Article 92 of CC, Sections 5 and 6). Otherwise, EPT would be considered extraordinary, granted only if the judge believed sole physical custody was contrary to the best interest of the child and after a favorable consultation report from the General Attorney (Article 92 of the CC, section 8). Not surprisingly, the 2005 law resulted in few EPT awards (less than 11% of total custody decisions in 2009, five years after its approval). In practice, opposition by one parent often was sufficient to avoid joint physical custody after divorce, partly due to the role

<sup>&</sup>lt;sup>7</sup> Under Article 92, a judge that grants the legal custody to one and not both parents must justify the decision by outlining the reasons for deviating from the standard. This aspect was not affected by the 2005 reform.



Fig. 1. Rulings granting EPT as a percentage of all divorce rulings: difference between treated and control regions.

Notes: Authors' calculations based on data from the Spanish General Council of the Judicial Power. Data available at www.ine.es. The figure shows the difference between treated and control groups before and after the pro EPT reforms after removing group specific pre-trends and time and region fixed effects. The figure shows the estimated coefficients for the set of years before and after the reform dummies and the 5% confidence intervals, with standard errors clustered at the region level. Data about rulings granting joint custody are available from 2007, so the third year before the reform does not include Baleares, whose treatment starts in 2009.

of the General Attorneys, who tended to oppose EPT if parents disagreed about custody. Although a ruling of the Spanish Constitutional Court (185/2012, October 17, 2012) found it unconstitutional that judges' discretion would be restricted by opinions of General Attorneys, they continue to exert influences.

In 2009, several Spanish regions started to push for EPT laws, in an attempt to change the status quo. Spain comprises 17 regions (or autonomous communities), which embed 50 provinces.<sup>8</sup> Between 2009 and 2011, 5 regions passed pro-EPT reforms, which included 14 provinces; they represent approximately 38% of Spain's total population in 2015. The reforms were implemented in two different ways. First, by passing pro-joint custody laws that explicitly encouraged judges to grant EPT after divorce even when one of the parents (most often the mother) opposed it. Second, by changes in the criteria used by the Office of the General Attorney in custody related disputes, with the new criteria much in line with that of the new pro EPT laws. Catalunya, Aragón and Valencia followed the first approach, whereas Baleares and País Vasco followed the second (see Appendix 1 for a detailed explanation of the reform process in these two regions). The first region to exhibit a surge in rulings granting EPT was Baleares in 2009; the first region to pass a pro-EPT law was Aragón in 2010.<sup>9</sup> followed by Catalunya a few months later.<sup>10</sup> Then Comunidad Valenciana and Navarra passed their laws in 2011.<sup>11</sup> Although País Vasco did not reform its Civil Code until 2015,<sup>12</sup> we note a surge in EPT rulings in 2011. The reforms vary in their content and emphasis and have been analyzed elsewhere (e.g., Solsona et al., 2017). The main push for EPT comes from the stated principle that parental disagreements are not sufficient reasons to deny it; however, Navarra's reform appears mostly cosmetic, as a simple declaration of intentions that does not differ much from the spirit of the 2005 Law (Solsona et al., 2017). Therefore, we exclude Navarra, which accounts for only 1.4% of the total Spanish population, from our empirical analysis of the treated group. The results remain robust whether we include it or not.

The reforms in these five regions elicited strong increases in EPT awards. For example, Aragón and Valencia doubled the percentage of EPT awards, just two years after their laws were introduced (from 10.2% and 9.1%, respectively, to 19.4% and 18.9%). In Catalunya, Valencia, and Aragón together, the incidence of EPT awards reached 40% just five years after the approval of the EPT laws. In contrast, Madrid, still ruled by the 2005 law, has maintained a constant percentage of EPT awards, of around 12% between 2010 and 2012, which increased to just 17% at the end of the study period.

Fig. 1 shows the effects of the reform on the incidence of EPT, defined as the percentage of rulings granting EPT among all divorce and separation rulings involving custody. The figure displays the difference between treated and control groups before and after the pro EPT reforms after removing group specific pre-trends and time and region fixed effects. As can be seen, before the reforms, the average incidence of EPT between treated and control regions are quite similar. However, immediately after the reforms, the incidence of EPT starts to increase in the treated regions relative to the control regions, reaching a significant difference of 30 percentage points 5 years after the reforms.

<sup>&</sup>lt;sup>8</sup> In addition to the 50 provinces and 17 regions, there are two small autonomous cities in the north of Africa: Ceuta and Melilla. Due to the extremely small sample size of those cities and the socio-demographic singularities we exclude them from our analysis.

<sup>&</sup>lt;sup>9</sup> Law 2/2010 of May 26, 2010.

 $<sup>^{\</sup>rm 10}\,$  Law 25/2010 of July 29, 2010.

<sup>&</sup>lt;sup>11</sup> Navarra: Law 3/2011 of March 27, 2011. Valencia: Law 5/2011 of April 1, 2011.

<sup>12</sup> Law 7/2015 of June 30, 2015.

A) Political orientation of the regional government parties in the years around the reforms



## B) Youth criminality rates in 2009



**Fig. 2.** (a) Political orientation of the regional government parties in the years around the reforms (b) Youth criminality rates in 2009. *Notes:* T are the treated regions and C are the control regions. In Panel A), for the treatment regions, the figure displays the political orientation of the party that was governing at the time of the pro joint custody reform (2009 in Baleares, 2010 in Catalunya and Aragón and 2011 in Valencia and País Vasco). For the control regions, the figure displays the political orientation of the parties governing in 2009 and 2010. In Panel B) the figure displays the regions classified by the level of youth criminality rates (below or above the median) in 2009. The youth criminality rate was calculated as the number of youth convicted of offenses per 1000 youth population (between 14 and 17 years old). Source: Spanish National Statistics Institute.

These results are similar to Halla's (2013) finding that the effects grow over time in the United States, except that we uncover an even stronger effect of Spanish EPT laws. Four to five years after the U.S. reforms, EPT incidence increased by 7.5 percentage points (Halla, 2013), compared with 30 percentage points in our case. Also, in Spain, the incidence of EPT before the reform was quite low, at 9.5% (or 15.3% for the entire period). The rapid and intense increase in the incidence of EPT thus is highly relevant, especially considering that we can only analyze short-term effects of the reform.

Importantly for our identification strategy, the reforms seem to be orthogonal to the regional socio-political context and to the pre-reform levels of our outcomes of interest. As can be seen in Panel A of Fig. 2, joint custody reforms have been promoted by both right and left oriented political parties with no clear pattern across treated and non-treated regions. Panel B of Fig. 2 also shows that treated and control regions are heterogeneous in terms of youth criminality rates, suggesting that concerns related to youth behavior was not driving joint custody reforms.

We also seek to test whether the surge in EPT in reform regions is a result of the reforms or else a signal of a new consensus in society. Appendix Fig. A2 traces the number of child custody rulings by Provincial Appeal Courts, as a percent-

age of all rulings by those Appeal Courts. The increase in EPT awards has been contemporaneous with an increase in child custody litigation, suggesting an exogenous increase in EPT awards due to new laws and procedures. Furthermore, in Fig. A2, this increase in litigation occurs in all the reform regions, but not in Madrid, where instead, the percentage of child custody litigation is rather low and constant over time.

### 4. Data and descriptive statistics

## 4.1. Divorce and female employment rates

To measure the impacts of EPT laws on the divorce rate, we use official records and province-level population data. Annual records of nullity, divorces, and separations are collected by the General Council of the Judiciary and compiled by the Spanish National Statistical Institute. To estimate populations at the province level, we use microdata from the Spanish Labour Force Survey (LFS; second quarter). This quarterly survey, representative of the Spanish population at the province level, offers detailed socio-demographic information, so we can estimate the relevant subpopulation group in each case (e.g., total, married, unmarried, female population, subpopulations by age).

We calculate province-level marital dissolution rates (hereafter, divorce rate), equal to the number of divorces and legal separations per 1000 of the total married or cohabitating population. We include legal separations because in Spain, legal custody rules are the same for married or cohabitating couples with dependent children. We use province-level data from 2007 to 2016 (500 observations); this microdata is only available since 2007. In turn, we can calculate group-specific divorce rates that are relevant for our analysis (e.g., who was the plaintiff).

To test how the custody reform affected female employment, we use the Spanish Continuous Sample of Working Histories (CSWH). This large administrative records data set comprises 4% of the Spanish population employed or with a relationship with the Spanish Social Security (e.g., those not working but receiving unemployment benefits, pensioners). The main advantage of the CSWH over the more standard labor force survey is that it keeps track of the work history of each person since they entered the labor market, so we can control for pre-divorce employment outcomes. Also, though not reported directly, it is possible to identify the year of separation. Furthermore, the CSWH offers a larger sample size than the labor force survey. However, this data set is specific to working or active women and excludes those who do not participate in the labor market. Spanish women of prime adult age in 2016 reached a labor market participation rate greater than 84%, so the CSWH still is highly representative of the overall female population. It contains detailed information about each job held (duration, type of contract, location, type of occupation, type of activity measured at the 3-digit industry level) and demographic characteristics, including age, gender, place of birth, education levels,<sup>13</sup> and household composition (i.e., gender and birth date of each household member). The socio-demographic characteristics come from the Municipal Registry of inhabitants, matched with the CSWH in each wave. We use information about household composition to identify women's marital and family status, with a specific focus on women age 25 to 45 years who live with children and a male partner.<sup>14</sup> We use all available waves of the CSWH from 2005 to 2016 (the 2004 wave is available, but it lacks information about cohabitation). Our sample contains a total of 2064,695 observations (200,790 individuals), of which 1190,397 observations (111,864 individuals) are women and the rest, men. Of all the women (men) in the sample 19,359 (21,247) separated during the sample period, corresponding to 222,142 (242,017) observations.

Panel A of Table 1 contains the descriptive statistics for the main outcomes in the pre-reform period, split by treated and control regions. We find no differences in divorce rates but a small, statistically significant difference in the percentage of rulings granting joint custody. This percentage was 11.2% in treated regions in 2007–2008, versus 8.9% in control regions. Divorce rates are higher among couples with minors than among couples without minors (around 9% versus 5.5% on average) and this difference is observed in both treated and control regions. The share of contentious divorces is similar between couples with and without minors but its 10 percentage points lower in treated regions. Among contentious divorces, the ratio of wife-initiated divorces is around 10 percentage points lower among couples without minors before the reform than among couples with minors.

Employment among women aged 30 to 44 years also was slightly higher in treated regions in the pre-reform period: 83% versus 77% in control provinces. Then Panel B reveals that treated regions featured lower average unemployment rates in the pre-reform period (7.36 versus 9.96 in control regions) and a slightly lower sex ratio (0.96 versus 0.98 in control regions). We control for these two socioeconomic differences in our empirical specifications. We also include state and year fixed effects.

<sup>&</sup>lt;sup>13</sup> Information about education levels is not updated frequently, so any analysis that includes this variable must proceed with caution.

<sup>&</sup>lt;sup>14</sup> A male partner lives in the household and is of an age similar ( $\pm 10$  years) to the woman's. We establish a lower age restriction of 25 years to avoid including younger women living with their parents. It also seems reasonable, because the average age at which women give birth to their first child in Spain is 29 years. The upper threshold of 45 years helps excludes women whose children live outside the household. Fernández et al. (2013) show that with this age threshold, the family status of women in CSWH coincides in more than 95% of cases with the Census data.

Descriptive statistics: family outcomes and control variables before EPT law.

	Control	Treated
Panel A. Outcome variables		
EPT (as percentage of total divorces with child custody	8.88	$11.19^{\varphi}$
questions) <sup>a</sup>	(4.53)	(4.11)
Couples with minors	9.41	0.14
- couples with minors	(1.76)	(1 30)
- Couples without minors	5 18	(1.39)
- couples without minors	5.16	5.00
	(1.19)	(1.06)
Share of contentious divorces		
- Couples with minors	0.41	0.32 $^{\varphi}$
	(0.05)	(0.04)
- Couples without minors	0.39	0.29 <sup>\varphi</sup>
	(0.06)	(0.04)
Share of wife-initiated divorces		
- Couples with minors	0.65	0.64
	(0.04)	(0.05)
- Couples without minors	0.54	0.51 <sup>φ</sup>
	(0.04)	(0.03)
Female employment	0.77	0 82 0
remate employment	(0.42)	(0.29)
Panel B. Control variables	(0.42)	(0.58)
Unemployment rate <sup>b</sup>	9.96	7.36 <sup>φ</sup>
	(3.40)	(1.95)
Adults' sex ratio <sup>c</sup>	0.98	0.96 <sup>φ</sup>
	(0.04)	(0.02)

*Notes:* Mean and standard deviations in pre-reform period (2006–2008, except divorce data, which is for 2007–2008).  $^{\circ}$  Mean difference between the treatment and control provinces that is statistically different from 0 at 5% level.

<sup>a</sup> Percentage of rulings granting EPT over all divorce and separation rulings to which custody applies and number of divorces and separations per 1000 married or cohabitating adults. Authors' calculations based on divorce records and population from the Spanish Labor Force Survey.

<sup>b</sup> Equal to 1 if the woman is working and 0 otherwise, restricted to women aged 25 to 44 years. Unemployment rate is computed at the province level, as the number of people unemployed in the population who are 16 years or older.

<sup>c</sup> Adults' sex ratio is computed at the province level as the number of women relative to the number of men. Authors' calculations based on the Spanish Labor Force Survey.

## 4.2. Youth outcomes (ESTUDES)

The Spanish Survey on Drug Use in Secondary Education (ESTUDES) is a biannual, cross-sectional survey of students between 14 and 18 years of age, which seeks to identify the habits of teenagers related to the consumption of alcohol and other drugs. The survey sample size varies but averages around 30,000 respondents for each wave. In addition to questions about alcohol and drugs, it asks about whether respondents have been expelled from school in the previous year, the quality of their relationship with their parents, whether norms are clearly established by parents, and their frequency and timing of going out at night. In the empirical analysis, we consider two outcomes: risky behaviors and a combined measure of the quality of relationships with parents and behavioral norms. We use all available waves, from 2006 to 2016. More details and the descriptive statistics are discussed in Section 5.

## 5. Empirical specifications and effects of EPT law

## 5.1. Divorce rates<sup>15</sup>

To assess the effect of the policy on divorce rates we follow a DiDiD approach. Because equal parenting time after divorce is relevant for couples with minors but not for those without minors, we examine whether there are systematic differences in the evolution of divorce rates between couples with and without minors in treated versus control regions when the

<sup>&</sup>lt;sup>15</sup> We focus on the divorce rate and the employment rate of divorced mothers because these are the outcomes where we should expect to see the largest and more immediate effects of the EPT reforms. Previous versions of this paper also analyzed the effect of the EPT reforms on marriage and fertility rates. In general, the results were non-significant, which may be explained by the fact that EPT laws probably have a less immediate impact on these outcomes and we can explore up to a maximum of five years after the reforms. The results of this analysis are available upon request.

Tab	le	2
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Effects	of	EPT	laws	on	divorce	rates.

	Divorce rate (1)	Contentious divorces (2)	Wife initiated divorces (3)
Years since EPT law $\times$ minors	-1.11%	-0.44%***	-0.54%***
	(0.67)	(0.14)	(0.15)
Flexible specification			
Reform × minors	0.68%	-0.94%*	-0.55%
	(1.56)	(0.56)	(0.74)
1 Year $\times$ minors	-0.20%	-1.52%*	-0.98%
	(1.90)	(0.81)	(1.11)
2 Years × minors	-1.29%	-1.57%**	-1.12%
	(2.12)	(0.71)	(1.30)
3 Years $\times$ minors	-2.11%	-2.37%***	-2.41%**
	(3.07)	(0.70)	(1.17)
4 Years × minors	-3.42%	-2.65%***	-2.06%**
	(3.69)	(0.83)	(0.97)
$5+$ Years $\times$ minors	-7.48%*	-2.76%***	-3.72%***
	(3.99)	(0.89)	(1.00)

*Notes*: Results from estimating a ddd specification (equation 2) using annual province-level data from 2007 through 2016. In column (1), the dependent variable is the divorce rate (number of divorces and separations per 1000 married or cohabitating adults). The dependent variable in column (2) is the proportion of contentious divorces over total divorces and separations, while in column (3) it is the proportion of wife-initiated divorces over the total nonconsensual divorces. All the dependent variables are corrected for treatment and group specific pre-trends. We use province population weights. Coefficients are reported as the percentage change in the rates. All specifications include year, province fixed-effects, and control variables for the annual unemployment rate and adults' sex ratio (province level). Standard errors in parentheses are clustered at the province level (50 clusters). \*\*\* *P* < 0.01, \*\* *P* < 0.05, \* *P* < 0.1.

reforms passed. More precisely, we estimate a slightly modified version of Eq. (1):

Divorce 
$$rate_{git} = \alpha_0 + \alpha_1 Post_t + \alpha_2 Minors_g + \alpha_3 (Minors_g \cdot Post_t)$$
  
+  $\beta_1 X_{it} + \tau + \varphi_i + u_{git} \alpha_4 (Minors_g \cdot Treat_i) + \alpha_5 (Minors_g \cdot Treat_i \cdot Post_t) + \alpha_6 (Post_t \cdot Treat_i)$  (1)

Where the dependent variable is the divorce rate for couple type g, in province i, and year t, net of pre-reform treatment and control-specific trends.<sup>16</sup> *Minors*<sup>g</sup> is an indicator of the couple type (with or without minors); *Post*<sub>it</sub> is the number of years since the reform took place in province i; and *Treat*<sub>i</sub> is a binary indicator for the group of treated regions. Our triple difference estimator and coefficient of interest is therefore  $\alpha_5$ .

 $X_{it}$  is a vector of covariates,  $\tau$  are common (treated and non-treated) year fixed effects, and  $\varphi_i$  are province-specific fixed effects.

We also consider one variant of this specification, in which the policy variable is a set of dummies for each year after the reform (which we call the *flexible* specification). Formally, both specifications are dynamic, because the effect of the law can change over time, but in the linear specification, we require the effects to increase linearly with time, whereas in the flexible specification, we do not impose any structure. Therefore, the *flexible* specification offers a test of the validity of our results. That is, evidence of a coherent path of increasing effects would be reasonable; society likely needs time to assess the consequences of new laws and incorporate them into decisions. As Wolfers (2006) notes, any dynamic policy effects cannot be captured fully by a single dummy, and treatment-specific trends would reflect not only different preexisting trends across regions but also differences in the evolution of the outcomes of interest between reform and non-reform regions after the adoption of EPT. As an example, one would expect EPT laws to affect spouses' behavior during marriage, for example, by changing their incentives to make marriage-specific investments, such as children. These behavioral changes take time to materialize and hence they will affect the value of marriages and the propensity to divorce progressively over time. A similar reasoning can be made with respect to the effects of EPT laws on the labor supply of spouses. Mothers' willingness to work could increase with EPT, anticipating the new post-divorce scenario, but finding a job or increasing the number of hours in the current one could take time, either in a search process or negotiating with the current employer. Finally, EPT laws will probably have an influence over social norms which will not be immediate but will grow over time. One of the catalysts for these changes in social norms may have to do with the impact of the laws on the labor supply of husbands and wives, something that we have already mentioned that takes time. In turn, the behavioral changes that are the result of changes in those social norms may affect the distribution of time within households, the value of marriages and the value of outside options in the event of divorce.

Results are shown in Fig. 3 and Table 2. Fig. 3 plots raw differences between treated and non-treated regions pertaining to the evolution divorce rates before and after the EPT law, comparing couples with and without minors. The graphs show

<sup>&</sup>lt;sup>16</sup> We estimate pre-reform trends separately for treatment and control provinces, extrapolate them to the entire period and subtract them from the original outcome variable.



Fig. 3. Divorce rates and divorce composition before and after passage of EPT laws in treated and non-treated regions.

*Notes*: The figures show the difference between treated and control groups before and after the pro EPT reforms after removing group specific pre-trends and time and region fixed effects. The graphs show the three-year moving averages and scales the series of couples with minors to match values for the couples without minors in 2009.Figures display the estimated coefficients for the set of years before and after the reform dummies and the 5% confidence intervals, with standard errors clustered at the province level. In panel a, the dependent variable is the number of divorces and separations per 1000 married or cohabiting couples; in panel b, the share of contentious divorces over all divorces and separations; in panel c, the share of wife-initiated divorces.

the three-year moving averages and scales the series of couples with minors to match values for the couples without minors in 2009. Table 2 contains the Eq. (1) results for the divorce rates. All specifications use province-level population weights, and the coefficients reflect percent changes in the dependent variable.

Panel a of Fig. 3 depicts the evolution of the divorce rate (number of divorces and separations per 1000 married or cohabitating adults).<sup>17</sup> In support of our prediction of parallel trends, differences between treated and non-treated regions in both types of couples show similar patterns before the introduction of new laws and they start diverging shortly after the legal change. Immediately after the legal change, there is a relative decrease of divorce rates in treated regions among couples with minors. Instead, the divorce rate of couples without minors increases in treated regions relative to control regions. As consequence, the gap between the two types of couples increases over time, although it is not statistically significant at the 5% level as indicated by the confidence intervals.

Results in Column 1 of Table 2, which also control for macroeconomic conditions and sex composition of the different regions, confirm the patterns we observed in Fig. 3: EPT laws decreases divorce rates among couples with minors in comparison with couples with no minors but the effect is not statistically significant at conventional levels. Specifically, EPT laws decrease the divorce rate by 1.11% every year, and in the *flexible* specification, this effect grows over time. Five years after the approval of the new law, the divorce rate of couples with children had decreased 7.48% in the treated provinces, an effect statistically significant at 10% level. Note that Halla (2013) also find no convincing evidence of an impact of joint custody laws on divorce rates in the United States. As explained before, the effect of EPT on the divorce rate is a priori ambiguous since EPT laws lower the cost of divorce for men but increase it for women. The lack of a significant effect is therefore consistent with this theoretical ambiguous prediction.

We then look for some compositional effects on divorces rates. Panel b of Fig. 3 displays the ratio of contentious divorces (number of contentious divorces and separations over total divorces and separations). The share of contentious divorces decreases in treated regions relative to control regions among couples with minors but it increases among couples without minors. As consequence, the gap between the two types of couples decreases over time. Column 2 of Table 2 confirms this result. The linear specification shows that the share of contentious divorces among couples with minors decreases at an average rate of -0.44% per year in treated regions. The flexible specification confirms the pattern of growing effect across time: 5 years after the EPT law was passed, the share of contentious divorces decreased by 2.76%, equivalent to an 8.6% decrease respect to pre-reform mean  $(32\%)^{18}$  All the coefficients are statistically significant at standard confidence intervals. As discussed before, the decrease in the share of contentious divorces after EPT laws may reflect a more balanced distribution of bargaining power between men and women when the couple dissolves. Therefore, both spouses have greater incentives to reach an agreement and avoid a judicial confrontation with an uncertain outcome.<sup>19</sup>

The previous result is reinforced by the evidence presented in Panel c of Fig. 3, which shows that in cases in which one spouse is the plaintiff, the share of wife-initiated divorces decreased in treated regions relative to control regions. The decrease is clearly higher among couples with minors. Again, results in Column 3 of Table 2 confirm the pattern we observe in the graph: the share of wife-initiated divorces decreases by 0.54% per year in treated regions. The flexible specification indicates that the effect grows overtime and becomes statistically significant three years after the approval of the new laws. At year +5, the share of wife-initiated divorces had decreased 3.72%, equivalent to a 5.8% decrease respect to the pre-reform mean (64%). This finding is consistent with the assertion that EPT laws reduce the cost of divorce for men but not for women.

To alleviate concerns regarding parallel trends, we have checked the robustness of our results by using the synthetic control group approach. The results, shown in Appendix Fig. A3, are consistent with a decrease in the divorce rates, a decrease in contentious divorces and a decrease in wife-initiate divorces among couples with minors.

### 5.2. Female employment: divorced mothers

We turn to the results of the analysis with Spanish longitudinal data (CSWH), focusing first on divorced mothers, the group most affected by the EPT laws. The CSWH enable us to analyze employment trajectories of divorced women, so we can estimate the effect of EPT laws relative to pre-divorce employment levels. For comparison, we present the trajectories of men and of women who do not divorce too. For this analysis, we use a slightly modified version of Eq. (1):

$$Y_{ijt} = \alpha_0 + \beta \sum_{k=-3}^{k=-1} PRE_{kit} + \gamma \sum_{k=0}^{k=3} POST_{kit} + \rho \sum_{k=-3}^{k=-1} PRE_{kit} \cdot EPT_j$$

<sup>&</sup>lt;sup>17</sup> Given that we are comparing divorces of couples with and without children, we adapt the denominator to reflect the particular population group. That is, we divide the number of divorces when minors are present by the number of married or cohabiting couples who have children under 18 and the number of divorces whit no minors by the number of married or cohabiting couples who do not have children under 18.

<sup>&</sup>lt;sup>18</sup> Note that this decrease means that the share of contentious divorce among couples with minors in treated regions would decrease from 32% to 29%, reaching the share of contentious divorce among couples without minors (see the pre-reform means of both groups in Table 1).

<sup>&</sup>lt;sup>19</sup> This result is not inconsistent with the evidence in Appendix Fig. A2 of increasing numbers of custody-related disputes presented to Appeal Courts. Rather than reflecting the larger share of consensual divorces in Courts of First Instance, Appendix Fig. A1 suggests that more nonconsensual divorces involving child custody end in higher courts, such as Appeal Courts. This higher-level litigation might result if the new legislation spurred appellants to continue fighting for custody.

 $\nu_{-3}$ 

$$+\sigma \sum_{k=0}^{n-2} POST_{kit} \cdot EPT_j + \alpha_1 Trend_t + \alpha_2 (Trend_t \cdot EPT_j) +\alpha_3 X_{it} + \tau_t + \varphi_j + u_{ijt}$$
(3)

where  $Y_{it}$  is the outcome of interest for individual i living in province j in year t;  $PRE_{kit}$  is a set of dummies that equal value 1 if the individual separates k years after t (k takes values between -3 and -1);  $POST_{kit}$  is a set of dummies that equal value 1 if the individual separated k years before t (k takes value between 0 as the year of the separation and 3);  $EPT_j$  is a dummy variable that equals value 1 if the individual separated in a province that passed an EPT law, such that the vector  $\sigma$  contains the coefficients of interest;  $Trend_t$  is a linear time trend;  $Trend_t \times EPT_j$  is the interaction of the linear time trend and the treatment;  $X_{it}$  is a vector of covariates that includes age, education level, number of children, and age of the youngest child dummies;  $\tau$  are year fixed effects; and  $\varphi_i$  are province fixed effects.

To get a better sense of the trajectories and how they are affected by EPT laws, we present the results graphically, using measures of the number of days in the year in which an individual was employed. Panel a in Fig. 4 plots the level of employment for four groups: men in intact families, men observed separating, women in intact families, and women observed separating during the sample period. Before separation, we note some important differences between women in non-EPT versus EPT settings. That is, women who separate under an EPT law work significantly less, prior to their separation, than do other separating women (-5.3% on average) or women in intact families. These differences are statistically significant at standard confidence levels. As we noted, women separating under the EPT law are a selected group, who may adopt more traditional household roles, with less dedication to paid work. These differences do not arise for men. If they separate, they work similar amounts, regardless of the existence of an EPT law (no statistically significant difference). After separation, women in non-EPT settings suffer significant decreases in their employment (almost 6% decline in four years). Men who separate also suffer a decline in employment, but it is of a much smaller magnitude (2%-4% decrease, depending on whether there is an EPT law in place). Women who separate under an EPT law exhibit a different pattern; their separation has little effect on their employment level. Thus, women who separate under an EPT law experience a relative increase in employment of 5.65% in just four years (from one year before to three years after separation, as in Panel b; the coefficients of the difference between women separating with versus without an EPT law are significant at standard confidence levels).<sup>20</sup> The increase in relative employment is driven by a smaller decline in employment compared with other women, rather than an increase in absolute terms. The contrast between men and women is evident in Panel b of Fig. 4: men who separate under an EPT rule increase their relative employment by 1.5%. To put this result in context, the estimated effect of joint custody laws is equivalent to that of a wage increase between 6.5% and 10.5%<sup>21</sup>

We consider several explanations for the smaller decline in employment among women who separate under an EPT law than those who separate in regions without EPT laws.<sup>22</sup> First, after a separation, parents may have less time to work, because they have sole responsibility for taking care of their children when they have custody of them. This effect should be particularly strong for women who gain sole custody of their children but weaker for those who are subject to EPT laws. Accordingly, the smaller decline in employment among men, compared with women, suggests that men may rely more on other arrangements (e.g., grandparents, child-care services, etc.) to care for the children after separating. Second, the preseparation data suggest that women who separate without an EPT law are particularly devoted to work, so the potential reduction in work schedules after separation could be greater. This hypothesis is inconsistent with the pattern observed in the data though, because the difference in employment between the two groups of divorced women grows with the number of years since the divorce. If the need to reduce work schedules could explain the observed pattern, we would anticipate a greater effect of the EPT law (or non-EPT law) in the initial years after the divorce, while working mothers attempt to adjust to their new situation. Additionally, the analysis of the intensive margin (hours per week) shows no effects of the EPT laws. Third, women who separate without an EPT law, all else being equal, receive more wealth transfers from their ex-husbands (e.g., child support, use of the marital house), which could create perverse incentives and reduce their willingness to work. Unfortunately, the available data do not permit us to test this alternative explanation.

The other panels in Fig. 4 explore differences across groups of women. In panel c the effects are greater among less educated women (6.93%) compared with highly educated women (4.61%), perhaps reflecting their likely lower earnings, which limit their abilities to outsource child-care, such that these women encounter greater time constraints after their divorce. Income transfers from ex-husbands are relatively more important for low educated (low earnings) women, in which case the negative incentive effects might be stronger too. Panel d indicates that much of this effect can be explained by women who stop working entirely; dropping these women from the analysis reduces the difference between the two groups

<sup>&</sup>lt;sup>20</sup> The comparison of women with and without children yields very similar results. Relative to 1 year before separation, the employment of mothers in treated regions increased by 5.5% compared to mothers in control regions. In contrast, the employment of childless women in treated and non-treated regions follow much more similar patterns, with relative employment increasing by less than 2 percentage points in regions affected by the reforms.

<sup>&</sup>lt;sup>21</sup> For this back-of-the-envelope calculation we use recently estimated values for the compensated elasticity of female labor supply, ranging from 0.54 (Hicksian elasticity) to 0.87 (Frisch elasticity). See Attanasio et al. (2018).

<sup>&</sup>lt;sup>22</sup> Note that one possible explanation for our results is that EPT laws changed the composition of women (and men) that divorce, increasing the share of women with a lower propensity to work even before divorce. However, when we exploit the longitudinal nature of the data and we re-estimate our specifications with individual fixed-effects, we find practically identical results, indicating little room for compositional changes.

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## Fig. 4. Effects of EPT laws on the employment of divorced mothers (CSWH).

*Notes:* These results come from the estimate of Eq. (3), for which the dependent variable is the number of days employed during the year. In Panel a, the employment of men and women in intact versus separated families is evaluated at the same ages. In Panels b–f, the estimated coefficients are transformed into percentage differences between those separating with and without an EPT law in place, normalized to 0% one year before the separation. Panel b compares the results for women versus men; the relative difference between women (men) in EPT or non-EPT jurisdictions is normalized to 0% one year before separation. Therefore, the graph plots the percentage employment gain (+) or loss (-) in relative employment, according to the time before or after divorce. Panel c presents the results if the individual divorced in or after 2011 and for high and low FLFP provinces. Panel d distinguishes individuals with high versus low levels of education, where the high level is defined as post-secondary school degrees. In Panel e, the results come from a regression that excludes women who do not work during the year. Panel f runs separate regressions for women by the age of their youngest child.

of women by more than 60%.<sup>23</sup> Finally, Panel e shows that the effects are greater among women with children younger than 12 years (5.80%) than those with children older than 12 years (3.24%). Thus, time constraints after divorce appear important for explaining differences between women who separate with and without an EPT law in place.

## 5.3. Employment of fathers and mothers in intact families

Table 3 shows the results of estimating Eq. (1), where the dependent variable is the employment of individuals in intact families. The sample consists of fathers and mothers that stay with the same partner during the sample period (2005–2016). We estimate the effect of EPT laws in two different measures of employment: the usual hours worked per week (*intensive margin*), and the number of days worked per year (*extensive margin*). We run two specifications, one with individual fixed

<sup>&</sup>lt;sup>23</sup> In an analysis of usual work weeks, we do not find significant differences between women separating under a EPT law and other separating women. These results are available on request.

Effects of EPT laws on the employment of intact couples with children (CSWH).

	Intensive margin (usual hours/week)			Extensive margin (days/year)				
	Fathers		Mothers		Fathers		Mothers	
	OLS (1)	Individual FE (2)	OLS (3)	Individual FE (4)	OLS (5)	Individual FE (6)	OLS (7)	Individual FE (8)
Years since EPT law	-0.97%***	-0.94%***	1.71%***	1.53%***	-3.49%***	-3.28%***	1.72%***	1.32%***
Flexible specifica- tion	(0.096)	(0.019)	(0.201)	(0.035)	(0.203)	(0.047)	(0.319)	(0.068)
EPT reform	-1.50%*** (0.335)	-2.05%*** (0.062)	2.76%*** (0.568)	3.30%*** (0.122)	-7.70%*** (0.883)	$-8.92\%^{***}$ (0.181)	2.80%** (1.200)	3.70%*** (0.259)
1 year	-2.24%*** (0.367)	-2.52%*** (0.076)	3.83%*** (0.618)	3.87%*** (0.145)	-10.09%*** (1.125)	-10.75%*** (0.215)	4.04%*** (1.278)	4.13%*** (0.302)
2 years	-2.74%*** (0.422)	-2.83%*** (0.088)	4.86%*** (0.739)	4.61%*** (0.164)	-11.83%*** (1.126)	-11.96%*** (0.240)	5.66%*** (1.442)	5.13%*** (0.336)
3 years	-3.42%*** (0.452)	-3.45%*** (0.098)	6.29%*** (0.812)	5.85%*** (0.178)	-13.78%*** (1.008)	-13.57%*** (0.253)	6.62%*** (1.469)	5.72%*** (0.352)
+4 years	-4.99%*** (0.409) 1903,333	-4.89%*** (0.100) 1903,333	8.68%*** (0.951) 1903,333	7.91%*** (0.180) 1903,333	-16.59%*** (0.758) 2064,695	-15.92%*** (0.231) 2064,695	8.11%*** (1.412) 2064,695	6.48%*** (0.334) 2064,695
Observations Individuals	198,248	198,248	198,248	198,248	200,790	200,790	200,790	200,790

*Notes:* Results from estimating Eq. (4) using the Continuous Sample of Working Histories micro panel data from 2003 through 2016, with the sample of men and women aged 25 to 44 years in intact couples with children. The dependent variables are corrected for treatment and gender specific pre-trends. Coefficients are reported as the percentage change in the female or male employment rate for each group, considering the mean pre-reform level in treated provinces. All specifications control for age, education, number of children and include year and province fixed-effects. In columns (1) to (4) the sample consists of individuals with a job. Standard errors in parentheses are clustered at the province level (50 clusters) in OLS specifications and at the individual level in individual FE specifications. All the differences between men and women are statistically significant at the 1% level. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

effects and one exploiting the cross-sectional variation in the data (OLS). As in the previous specifications, we estimate the model net of pre-reform treatment and gender specific trends. We pool the sample of mothers and fathers and estimate the following equation:

$$Y_{it} = \alpha_0 + \alpha_1 Post * MOTHER_{it} + \alpha_2 Post * FATHER_{it} + \beta_1 X_{it} + \tau + \varphi_i + u_{it},$$
(4)

where  $Y_{it}$  is the measure of employment (hours per week or days worked per year) and  $\alpha_1$  and  $\alpha_2$  are the coefficients of interest. *X* has the usual controls, including gender. Our results are robust to running separate specifications for fathers and mothers or to interact the controls in *X* with gender.

The table shows a clear pattern, with EPT laws increasing the employment of mothers in intact families and decreasing the employment of fathers. This is visible in the first row, which shows the effect of EPT laws on employment levels, per year since the reform was passed. As a result of the EPT laws, mothers' hours worked per week increases between 1.53% and 1.71% per year and fathers working hours decreases approximately 0.9% per year. The results are similar for the extensive margin, where mothers' number of days worked increases between 1.32% and 1.72% and fathers' working days decrease between 3.28% and 3.49% per year. All the effects and all the differences between men and women are statistically significant at the 1% level. The results in the subsequent rows confirm this pattern with an impact +4 years after the law between 6.5% and 8.7% for women and between -4.9% and -16.6% for men, depending on the specification. This result is consistent with Nguyen et al. (2018), Altindag, et al. (2015) and Nunley and Seals (2011), who find that the US joint custody laws of the 1980s and 1990s induced a reallocation of time within marriage, with mothers working more in the market and fathers working more in the home. The magnitude of our estimates are also consistent with those of previous studies. For example, Nunley and Seals (2011) and Altindag et al. (2015) find that US joint custody laws increased mothers' labor supply between 9% and 10% on average post reform (equivalent to our estimated effect 5 to 7 years after the reforms). Or, as we did before, using recent estimates of female labor supply elasticities, our estimated effects for mothers five years after the reforms are equivalent to a wage increase between 7.5% and 15.9%.

Table 4 shows that the effects on mothers are driven mainly by the groups that we expect to be most affected by the new laws: low educated women and those with a lower labor market attachment pre-reform. For example, in column (1) the number of hours worked per week increases 1.26% for mothers with more than a high school degree versus 1.87% for those with less than a high school degree. Similarly, working hours increase 1.22% for women that had a level of employment pre-reform above average versus 5.11% for those that had a level of employment pre-reform below average.

Effects of EPT laws on the employment of mothers in intact couples (CSWH).

	Intensive 1	margin (usual hours/week)	Extensive margin (days/year)		
	OLS(1)	Individual FE(2)	OLS(3)	Individual FE(4)	
Baseline specification	1.71%***	1.53%***	1.72%***	1.32%***	
	(0.201)	(0.035)	(0.319)	(0.068)	
By level of education					
Less than high school degree	1.87%***	1.88%***	2.92%***	3.11%***	
	(0.175)	(0.065)	(0.425)	(0.136)	
With a high school degree	1.62%***	1.48%***	1.09%***	0.75%***	
	(0.190)	(0.065)	(0.200)	(0.122)	
More than high school degree	1.26%***	1.06%***	0.24%**	-0.28%***	
	(0.178)	(0.055)	(0.117)	(0.092)	
By the level of employment pre-reform					
Below sample average <sup>1</sup>	5.11%***	4.49%***	9.50%***	9.68%***	
	(0.313)	(0.094)	(0.706)	(0.225)	
Above sample average	1.22%***	1.09%***	0.70%**	0.78%***	
	(0.130)	(0.031)	(0.278)	(0.051)	

*Notes:* Results from estimating Eq. (4) using the Continuous Sample of Working Histories micro panel data from 2003 through 2016, with the sample of women aged 25 to 44 years in intact couples with children. The dependent variables are corrected for treatment and gender specific pre-trends. Coefficients are reported as the percentage change in the female employment rate for each group, considering the mean pre-reform level in treated provinces. All specifications control for age, education, number of children and include year and province fixed-effects. In columns (1) and (2) the sample consists of women with a job. Standard errors in parentheses are clustered at the province level (50 clusters) in OLS specifications and at the individual level in individual FE specifications. <sup>1</sup> The pre-reform sample averages are 35 h per week and 276 days worked in a given year. All the differences between men and women are statistically significant at the 1% level. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Overall, the results in Tables 3 and 4 suggest that the EPT laws had a significant effect on fathers and mothers of intact families, causing a shift towards a more equal distribution of tasks between the two parents and away from the family model where the father acts as the breadwinner.

#### 5.4. Adolescent behavior

To test for any association between EPT laws and behavioral outcomes for children, we rely on the biannual, crosssectional ESTUDES survey of teenagers, collected between 2006 and 2016, which includes approximately 165,000 teenagers of non-immigrant origin. The survey asks teenagers about whom they live with, though not the marital status of their parents. Therefore, we conduct the analysis for the entire sample of adolescents, living in both intact and non-intact families.

Furthermore, an analysis according to parents' marital status may be inaccurate, because as we have shown, EPT laws change the dissolution and the formation of families. Thus, the analysis of each separate group will be subject to compositional effects.

Finally, these data provide a snapshot of the *stock* of teenagers at a given time, not necessarily those more directly affected by new EPT laws (e.g., whose parents married or divorced under the new laws). This analysis thus differs notably from our previous analyses of divorce-related outcomes, for which we observed the *flow* of divorces. This limitation leads us to expect that the effects will not be very large. The EPT laws also could have affected teenagers of parents who divorced before the reforms took place, because many divorce agreements were modified in the treated regions right after the new laws passed, presumably to match custody to the new legal environment. Appendix Fig. A4 indicates decisions modifying the terms of existing divorces in treated regions, expressed as a percentage of the total number of modifications. The number of modifications in treated regions reached a peak during 2010 and 2011, the reform years, then increased from 34%–35% of the total in 2007–2009 to 38% in 2011. The number of rulings modifying old divorce agreements decreased slightly, but it remained higher than in the pre-reform period (around 37%). Between 2010 and 2016, courts in the treated regions issued 74,850 rulings modifying the terms of old divorces, which represents 34.07% of all new divorce rulings between 2005 and 2009.

In the empirical analysis, we consider two outcomes: three combined measures of risky behaviors and individual measures of the quality of relationships with parents and behavioral norms. All outcome variables are standardized using the mean and standard deviation values for the control group. Following Kling et al. (2007), we compute summary indexes of risky behaviors, which reflect the unweighted aggregate measures of the different indicators.

Table 5 displays some descriptive statistics, for both control regions (with 118,307 individuals) and treated regions (with 47,928 individuals). In terms of demographic characteristics, these samples are similar, with an average age around 15 years,

Descriptive statistics for youth outcomes analysis (ESTUDES).

	Control	Treated
Number of individuals	118,307	47,928
Age	15.70	15.47
•	(1.22)	(1.18)
Public school (%)	0.61	0.52
	(0.48)	(0.50)
Education of mother (high school degree or less) (%)	0.60	0.57
	(0.49)	(0.49)
Education of father (high school degree or less) (%)	0.55	0.53
	(0.50)	(0.50)
High-risk activities		
Expelled from school last year	0.04	0.03
	(0.19)	(0.18)
Days consumed tranquilizers last month	0.28	0.31 <sup>\u03c6</sup>
	(1.84)	(1.95)
Binge: days was drunk last month	0.72	0.75 <sup>φ</sup>
	(2.00)	(2.00)
Days smoke marihuana last month	1.20	1.68
-	(3.91)	(4.57)
Took hard drugs last month	0.04	0.05
	(0.20)	(0.22)
How late finishes going out at night <sup>b</sup>	3.15	3.27
	(2.17)	(2.14)
Quantity of smoking (cigarettes) <sup>c</sup>	1.48	1.60
	(3.84)	(3.84)
Relationship with parents	0.00	0.01
Conflict: important fight with parents last year? <sup>d</sup>	0.36	0.35
	(0.48)	(0.48)
Quality relationship with mother <sup>e</sup>	2.81	$2.81^{\varphi}$
	(0.45)	(0.45)
Quality relationship with father <sup>e</sup>	2.76	2.77 <sup>φ</sup>
	(0.51)	(0.51)
Norms are clearly set by parents <sup>f</sup>	6.35	6.33 <sup><i>ϕ</i></sup>
	(1.20)	(1.19)

*Notes*: Mean and standard deviations refer to the pre-reform period (2006–2008). The statistics for the risk and relationship variables are before standardization. All mean differences between the treatment and control groups are statistically different from 0, except when indicated by  $\varphi$ .

<sup>b</sup> Categorical variable that takes values between 1 and 7, where 1 indicates "before midnight" and 7 is "after 8 in the morning." A value of 3, near the sample mean, indicates "between 1 and 2 in the morning."

<sup>c</sup> Equal to 0 for non-smokers.

<sup>d</sup> Dummy variable, 1 = yes, 0 = otherwise.

<sup>e</sup> Categorical variable that takes values of 1 ("Bad"), 2 ("Regular"), or 3 ("Good").

<sup>f</sup> Combination of four indicators for whether parents set clear norms about what is allowed at home, outside home, and whether parents know where the teenager is and with whom. Each indicator takes a value of 1 ("Rarely or almost never") or 2 ("Often or almost always"), so the maximum value is 8 and the minimum is 4.

and more than half have parents with a high school degree or less. Teenagers in the treated regions are less likely to be enrolled in a public school (0.58 versus 0.67 in control regions). In terms of risky behaviors, in general, we find a higher incidence in treated regions, and the mean differences are statistically different from 0. No such contrast arises for the variables that measure the quality of their relationship with their parents; instead, we find similar values across the two groups. However, for norm clarity, teenagers in treated regions report a lower degree than those in control regions.

In Table 6, Column 2, we report the estimates of the effects of three summary indexes of risky behavior (top panel) and of the measures of the quality of the relationship with parents (bottom panel). The column reports the coefficient estimated by our regressions (dummy variables for the type of school, gender, age, education level; province and year fixed effects; rate of unemployment at the year-province level). For the quality of relationship measures we also provide two versions of *p*-values: the original *p*-value from the regression and the *p*-value obtained after applying Romano and Wolf's (2016) step-down multiple hypothesis correction method to each outcome.<sup>24</sup>

Summary index 1 combines information about the incidence of seven different behaviors: binge drinking, marihuana smoking, cigarette smoking, how late at night, consumption of tranquilizers, being expelled from school last year and consumption of hard drugs. The first row in the table indicates that EPT significantly decreases risky behavior as measured by summary index 1 (coefficient significant at 1% level). The estimate coefficient of -0.013 indicates that the mean effect of being in the treatment group for high-risk activities outcomes is 2.4 percent of a standard deviation (0.54). The effect

 $<sup>^{24}</sup>$  Intuitively, the multiple hypothesis correction methods adjust *p*-values for the fact that the number of false positives (type1 error) increases with the number of tests performed. Typically, these methods result in considerable increases of the *p*-values.

Effects of EPT laws on youth outcomes.

	Economic Effect (per year since law was passed)	p-Values [original] [Romano-Wolf]
DIGU DEUAU/OD	r ·····	
RISK BEHAVIOR	A11	0.000
Summary muex 1:		0.000
High-risk activities	-0.013*** Perce	0.000
Billge driffkillg, illdriffudild, siflokillg, flow falle at	B0ys	0.000
night, tranquinzers, expense nom school, nard drugs.	-0.015	0.000
	-0.011***	0.000
Summary index 2:	0.020***	0.000
SOFT High-risk activities	-0.020	0.000
Binge drinking marihuana smoking how late at		
night tranquilizers		
Summary index 3:	0.003	0.151
HARD High-risk activities		
Expelled from school, hard drugs.		
RELATIONSHIPS		
Conflict: important fight with parents last year?	0.002	[0.511][0.613]
Quality relationship with father	0.006*	[0.088][0.188]
Boys	0.008***	[0.002][0.009] <sup>ρ ρ ρ</sup>
Girls	0.003	[0.493][0.712]
Quality relationship with mother	0.002	[0.448][0.613]
Boys	0.004	[0.139][0.217]
Girls	0.001	[0.841][0.851]
Norms are clearly set by parents	-0.036***	[0.000][0.000] <sup>ρ ρ ρ</sup>
Boys	-0.040***	[0.000][0.000] <sup>ρ ρ ρ</sup>
Girls	$-0.033^{***} \varphi \varphi$	[0.000][0.000] <sup><i>ρ ρ ρ</i></sup>

*Notes*: Results of estimating Eq. (1). Summary indexes 1, 2 and 3 are unweighted averages of the sum of the standardized values of the outcomes of interest. A higher value indicates a higher incidence of the risk activity. Outcomes are standardized using the mean and standard deviation of the control group. Column 2 reports the estimated coefficients. Estimates come from a regression including type of school dummies, gender and age dummies, province and year fixed effects, the rate of unemployment at the year-province level, dummies for the level of education and origin of each parent. Standard errors are clustered at the province level. In the third column, the first number indicates the p-value from the above regression and the second number is the p-value corrected for Romano-Wolf step-down multiple hypothesis correction method on each of the outcome.

\*\*\*\*, and \*\*\* indicate the estimate is significantly different from 0 at the 10%, 5%, or 1% level, respectively.

 $\rho, \rho, \rho$  and  $\rho, \rho, \rho$ , indicate that the estimated coefficient is significantly different from 0 at the 10%, 5%, or 1% level, respectively, using the Romano-Wolf correction method.

 $\varphi, \varphi\varphi$ , and  $\varphi\varphi\varphi$  indicate that the difference in the estimated effects between the two groups (by type of province, gender or age) is significant at the 10%, 5%, and 1% level, respectively.

is sizable taking into account that we are including adolescents living in both, intact and non-intact families. This effect is stronger among boys compared to girls, although the difference between the two groups is not statistically significant. The next two rows split the summary index into two sub-indices: summary index 2, which pools the five softer behaviors (binge drinking, marihuana smoking, cigarette smoking, how late at night, consumption of tranquilizers), and summary index 3, which pools the two harder types of behavior (being expelled from school last year and consumption of hard drugs). The two rows show that the decline in summary index 1 is driven by the softer types of behavior, since the coefficient of summary index 2 is large, negative and significant at the 1% level. The estimates of -0.020 indicates that the mean effect of EPT on soft high-risk behavior is 3.2 percent of a standard deviation (0.62).

Our finding of a negative effect of EPT on risky behavior by teenagers could be explained by the decrease in the divorce rate and the decrease in contentious divorces. Furthermore, if EPT laws enhance the relationship of teenagers with their parents we could see an improvement in adolescent behavior even for those affected by a divorce of their parents. The evidence presented in the bottom panel of Table 6 supports this hypothesis. There we show the effect of EPT laws on four different aspects of the relationship between teenagers and their parents: whether there has been an important conflict between teenagers and their parents in the last year, the quality of the relationship with the father, with the mother, and whether norms are clearly set by parents. We find that the EPT laws significantly improve the relationship of teenagers with the father, but not with the mother. The effect of EPT on the guality of the relationship with the father is 0.006, equivalent to 1.2 percent of a standard deviation (0.51). The effect is driven by boys. Also, we find that the EPT laws are associated with a perception of norms being less clearly set by parents (-0.036 or 3.0 percent of a standard deviation), with the effect again bigger for boys but also significant for girls. The coefficients for norm clarity, and relationship quality with fathers for boys remain statistically significant even when we implement Romano and Wolf's (2016) correction. Note that due to data limitations we cannot rule out the possibility that our results are driven by children in intact families. It could be, for example, that fathers who stay married after EPT laws invest more in their children thinking that they will retain a larger part of that investment after divorce, and this improves the relationship between fathers and boys and the behavior of adolescents. Sorting out those effects is undoubtedly an important topic for future research.

## 6. Robustness tests

We performed several analyses to check the robustness of our main results (see Table AP1). Clustering the standard errors at the region level has little impact on the significance of the results; all previously significant coefficients remain statistically significant at standard confidence intervals. The same can be said when we estimate the standard errors with boot-strapping. Excluding the pre-reform treatment-specific linear trends affects the magnitude and/or significance of most coefficients. We therefore interpret our results as deviations from pre-reform treatment-specific trends. Excluding the Balearic Islands and Basque Country from the sample has a little or no effect on the magnitude and significance of the estimated coefficients. We also show an alternative specification using a post-reform dummy instead of the variable "years since the reforms" used in our preferred specification. In all cases, the results of that specification are consistent with those of the baseline and flexible specifications. Finally, we assess whether our divorce estimates may be affected by selection of couples into marriages. Excluding couples who married before 2009 (that is, before the EPT reforms began), causes only a slight reduction in the magnitude of the effects but the main conclusions remain.

## 7. Concluding remarks

We analyze the effects of EPT laws on family outcomes and teenagers' behavior, in recognition of the growing implementation of such laws in the United States and Europe. Our results must be interpreted from the perspective of models of bargaining power within the household.

From that perspective, EPT laws, by equalizing the bargaining power of both spouses in a divorce proceeding, act as an incentive for them to reach beneficial agreements for both parents and their children. Hence, one of our main results is that EPT laws reduce contentious divorces. This is similar to the effects of mediation, which has been shown to reduce conflict in divorce proceedings, lead to remarkably improved relationships between nonresidential parents and children, as well as between divorced parents (Emery et al., 2005). In a sense, EPT laws create the conditions for a negotiation process to arise between the parties of a divorce similar to the one that is intended to be achieved through mediation, only that in the case of EPT laws, this process arises from interest of both parents to reach an agreement.

Also, our results indicate that EPT laws act as a mechanism to increase the bonds between parents and children, positively impacting the emotional development of the latter. That is, although the observed decrease in contentious divorces could partly explain the decrease in risky behavior of adolescents, if EPT laws enhance the relationship of teenagers with their parents we could see an improvement in adolescent behavior even for those affected by a divorce of their parents. This relationship has already been established in previous works (e.g., Nielsen, 2018; Turunen, 2017), but mostly from a correlational point of view, not a causal one as we do in this paper.

Finally, our study shows that joint custody laws produce incentives for a more equal division of labor between fathers and mothers. Unfortunately, the data do not allow us to know if this result is due to the greater availability of time of divorced mothers, or to a lower economic transfer in the form of child support (see, Chiappori et al., 2017 and Rangel 2006 for equivalent effects due to changes in alimony laws). However, the fact that we find that married fathers, not only married mothers, also adjust their behavior (they work less) suggests that another mechanism may come from the fact that joint custody laws increase the incentives for fathers to invest time with their children, anticipating that they will be able to reap the rewards of that investment even in the event of a divorce.

## **Declaration of interest**

"The authors have no conflicts of interest related to this research to disclose."

## Appendix 1: EPT reforms in the Balearic Islands and Basque Country

In the Balearic Islands and Basque Country increasing EPT was possible even in the context of the 2005 law, because that law granted discretion to judges, provided a favorable recommendation from the General Attorney. The coincidence in time between the surge in EPT awards in the Balearic Islands and the Basque Country and the reforms in neighboring regions suggests a contagion effect, which influenced judges' decisions and the principles guiding the General Attorney in those regions. Anecdotal evidence supports this explanation. For example, in May 2011, the General Attorney of Basque Country declared his determination to promote EPT. Furthermore, these regions introduced legislative initiatives in favor of EPT, and though the initiatives did not pass, they still might have influenced the judicial process and the postulates of the General Attorney. The Parliament of the Basque Country also approved a non-binding proposition, Law 3/2011 (April 12, 2011), regarding child custody that indicated its support for EPT and that urged reforms to the Spanish CC to reflect this preference. In the Balearic Islands, EPT was widely defended by various political and social groups during discussions of a new family mediation law, approved by the Parliament on November 30, 2010, though no explicit EPT resolution was included in the final text.

To determine if a change in the principles that guided court decisions and General Attorneys' recommendations occurred in Balearic Islands and Basque Country, we reviewed the rulings of their Provincial Appeal Courts in the years immediately before and after the reforms passed in the other regions. For a comparison, we also analyzed rulings by the Provincial Appeal

#### Table AP1

Robustness tests.

	(1) Divorce rate	(2) Contentious divorces	(3) Wife initiated divorces	(4) Employment of married fa- thers(hours/wee	(5) Employment of married moth- ek)ers(hours/week)	(6) Employment of married fathers(days worked)	(7) Employment of married mothers(days worked)	(8) Employment of divorced moth- ers(hours/week)	(9) Employment of divorced mothers(days worked)	(10) Risky behavior
A. Baseline specification	-1.11% (0.67)	$-0.44\%^{***}$ (0.14)	-0.54%*** (0.15)	-0.97%*** (0.10)	1.71%*** (0.20)	-3.49%*** (0.20)	1.72%*** (0.32)	-0.18% (0.13)	0.81%*** (0.186)	-0.013*** (0.002)
B. SE clustered at region level	-1.11%	-0.44%***	$-0.54\%^{***}$	-0.97%***	1.71%***	-3.49%***	1.72%***	-0.18%	0.81%**	-0.013***
	(0.79)	(0.14)	(0.14)	(0.18)	(0.19)	(0.35)	(0.35)	(0.14)	(0.291)	(0.003)
C. Bootstrap SE	-1.11%	-0.44%***	-0.54%***	-0.97%***	1.71%***	-3.49%***	1.72%*	-0.18%	1.72%*	-0.013***
	(0.48)	(0.13)	(0.16)	(0.18)	(0.50)	(0.36)	(1.02)	(0.15)	(1.02)	(0.003)
D. Without detrending	-0.57%	-0.35%**	-0.19%	0.22%***	-0.12%	-0.85%***	1.43%***	0.08%	-0.93%***	0.004**
	(0.68)	(0.14)	(0.15)	(0.07)	(0.16)	(0.15)	(0.22)	(0.13)	(0.13)	(0.002)
E. Without Balearic Islands	-0.95%	-0.46%**	-0.61%***	-0.95%***	1.62%***	-3.32%***	1.81%***	-0.03%	0.78%**	-0.013***
F. Single dummy for average	(0.87)	(0.16)	(0.14)	(0.10)	(0.22)	(0.22)	(0.35)	(0.14)	(0.28)	(0.002)
	-2.49%	-1.95%***	-1.86%**	-3.28%***	5.80%***	-12.52%***	5.89%***	-0.57%	3.28%***	-0.067***
G. Excluding couples married	(2.09)	(0.61)	(0.82)	(0.386)	(0.755)	(0.847)	(1.357)	(0.505)	(0.724)	(0.010)
	-0.68%	-0.27%**	-0.50%**							
area the policy change	(0.55)	(0.13)	(0.19)							

*Notes:* All specifications include year, province fixed-effects, and controls for the annual unemployment rate and adults' sex ratio (province level). Panel A displays the preferred specification, where all the dependent variables are corrected for treatment and group specific pre-trends and the standard errors (SE) clustered by province. Panel B displays the preferred specification when clustering the SE at the CCAA level. Panel C shows the wild-bootstrapping SE. Panel D uses the raw dependent variables and control for treatment-specific linear trends. Panel E shows the results of estimating the preferred specification without Balearic Islands and Basque Country. Panel F shows the results of using a post-reform dummy instead of years since the reform included in our preferred specification. Panel G shows the divorce results excluding those couples who married after 2009.



Fig. A1. Rulings favorable to EPT as a percentage of all divorce rulings by Appeal Courts in nonconsensual divorces. Source: Own elaboration based on the rulings published in the Spanish Center for Judicial Documentation (CENDOJ), with an analysis of 188 rulings, or approximately one-third of all judgments of the Provincial Appeal Court regarding child custody in nonconsensual divorces.



**Fig. A2.** Rulings by the Provincial Appeal Court regarding child custody as a percentage of all rulings by that court. *Source:* Own elaboration based on the rulings published in the Spanish Center for Judicial Documentation (CENDOJ).

Courts of Madrid. In total, we reviewed 188 rulings, or approximately one-third of all decisions by these appellate bodies regarding child custody in contentious divorces. Any changes in the guiding principles should be reflected in court rulings in contentious divorces, in which one parent opposes EPT. As predicted, the analysis indicates a strong contrast between the Balearic Islands and the Basque Country on the one hand and Madrid on the other (see, Appendix Fig. A1). Disagreement between the parents is often the only reason cited to deny EPT in Madrid; the court often held that the mere existence of a contentious divorce indicated a lack of parental agreement, so EPT would be detrimental for children. In Madrid, only about 5%–10% of the decisions by the Appeal Court granted EPT, a percentage that remained constant for the entire period we analyzed. Instead, in the Balearic Islands and the Basque Country more decisions explicitly stated that disagreement was not a sufficient reason to deny EPT, mimicking the EPT laws established in proximal regions. In these regions, EPT was granted in almost half of all cases after 2009 and 2011, respectively.







# C. Wife-initiated divorces





Notes: Trends in divorce outcomes among couples with minors: treated versus synthetic control group. In Panel A, the dependent variable is the divorce rate (number of divorces and separations per 1000 married or cohabitating adults); in Panel B the proportion of contentious divorces over total divorces and separations; and in Panel C the proportion of wife-initiated divorces over the total nonconsensual divorces. To find the synthetic control group, we use the pre-treatment average of (province-level) unemployment rate and adult's sex ratio as well as the corresponding outcome in 2007.



**Fig. A4.** Modifications of divorce agreements in treated regions as a percentage of all modifications. *Notes:* Data come from the General Council of the Judiciary Power in Spain. The graph depicts the number of court rulings that modify the terms of old divorces in treated regions as a percentage of the total.

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