

How Does Daddy at Home Affect Marital Stability?*

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Abstract

We investigate the effect of a law reform in Iceland that earmarked one third of the total parental leave to fathers on marital stability. This change was implemented in stages, and parents who had a child in 2001 were given the option to add one month of parental leave to the allotted six months but only if the additional month was used by the father. Fathers of children born before January 1, 2001 had no such separate or independent right to parental leave. The reform created substantial economic incentives for fathers to be more involved in caring for their children during their first months of life, and the take-up rate in the first year was 82.4%. We compare the marital stability of couples who had children just before and just after the reform and find that parents who are entitled to paternity leave are less likely to divorce during the first ten years of their child's life, the time in a relationship when the probability of a divorce is the highest.

JEL classifications: J12, J13, J16, J18

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1 Introduction

Divorce can wreak havoc on the families in which it occurs. Marital dissolution has a strong negative effect on the mental and physical health of both spouses, and there is strong evidence of a close connection between growing up in a one-parent family and suffering long-term economic and social difficulties (McLanahan and Sandefur, 1994; Waite and Gallagher, 2000; Gottman, 1998; Burman and Margolin, 1992). However, growing up in a household in which the parents have marital problems can also adversely affect a child. Marital distress and conflicts are, for example, associated with anxiety, poor social competence, health problems, poor academic performance, and reduced cognitive performance among children (Dadds and Powell, 1991; Gottman, 1989; Ghazarian and Buehler, 2010; Hinnant et al., 2013). Therefore it would not necessarily be beneficial to lower the divorce rate, as it is doubtful whether much would be gained if the reduction simply resulted from more unhappy couples staying together. Although influencing marital satisfaction is usually thought to be outside the role of policy makers, the prevalence of marital conflicts and dissolutions makes their negative impact highly relevant to societal outcomes. A policy that could lower divorce rates by directly reducing household stress and conflicts could therefore be highly valuable.

A few countries have introduced paternity leave, or a “fathers’ quota,” into their parental leave systems to encourage fathers to take a greater part in childcare. One of the main motivations for these reforms is the idea that gender equality in the household is a necessary condition for gender equality in the labor market. Although these policies are not aimed at increasing marital stability as such, they do affect the division of labor in the household and may therefore affect marital discord. In this paper we examine the introduction of a fathers’ quota in Iceland to investigate whether reserving part of the parental leave to fathers affects divorce risk. In Iceland three months of paternity leave were added to the existing six-month-long leave. The reform was implemented in stages, so that in 2001, one month of the parental leave was earmarked to fathers, which increased to two in 2002, and finally to three in 2003. We focus on the effect of the first month to be added, because the announcement of the reform occurred too late to affect the fertility choices of those parents who had children during the last months of 2000 and the first months of 2001. These parents make up our treatment and control groups.

The Icelandic policy reform is particularly interesting because it gave men the largest non-transferable share of parental leave (three months out of nine) in the world. Furthermore, Iceland and Sweden are the only countries that give equal non-transferable parental leave rights to mothers and fathers.¹ The take-up rate of the paternity leave in Iceland was also high, and the growth in men’s share of the total parental leave taken has been much steeper there than in the other Nordic countries. Among fathers who had children in 2001, 82.4 % took paternity leave (Eydal and Gislason, 2008). The average paternity leave was 39 days, that is, slightly more than the one month earmarked to them. In 2003, when the paternity leave had been increased to 3 months, 86.6 % of fathers took leave, and the average length of the paternity leave was 97 days. In effect, the policy shifted fathers from taking 0% share to taking one third of the total leave.

Our identification strategy is based on the fact that parents who had their child after the reform date did receive a treatment, namely paternity leave, whereas parents who had their child before the reform did not. The analysis is based on the intention-to-treat. We do not observe who is treated in our sample, but as our sample is representative of the relevant population, we expect around 82.4

¹In Sweden, men and women each get two non-transferable months out of 16 months total

% of the fathers in our treatment group to have taken paternity leave. We use a detailed, Icelandic register-based panel dataset to identify the causal effects of the reform by comparing these two groups of parents. The policy process was very fast—the new law was passed on May 9, 2000, and went into effect January 1, 2001—as a result, parents who gave birth around the time of the reform could not have known about it at the time of conception. This allows us to assess whether a shift towards greater equality, by facilitating more equal sharing of responsibility for childcare and housework between men and women, makes marriages more stable.

Our results show that the introduction of the paternity leave had a significant and sizable effect on the probability that parents would stay together during the first ten years after their child was born. If we focus on the couples, who had children three months before and three months after the reform, our results show that the paternity leave reduced the probability of parents’ separation by six percentage points five years after having their child, and by 5 percentage points ten years after having their child. The main effect stems from inexperienced parents, i.e., parents who do not have a child older than seven years, and from parents, who have the same level of education. On the other hand, the estimated effect on divorce probability is positive (although small and insignificant) when we look at couples where the father has a higher level of education than the mother.

To the best of our knowledge, this is the first paper to focus on the effect that paternity leave and greater equality in child-rearing have on divorce risk.² The paper draws on, and contributes to two strands of literature. The first is the growing literature on parental and paternity leave. A number of studies have looked at how parental leave (which in most cases is only used by mothers) affects parents and children (e.g., Lalive and Zweimüller, 2009; Carneiro et al., 2015; Dahl et al., 2013). On the other hand, only a handful of papers have investigated the causal impact of earmarking a portion of the parental leave for fathers. Among these is a paper by Johansson (2010) that investigates the effects on earnings of Swedish paternity leave reform in 1995 and 2002 using a difference-in-differences (DD) approach. Johansson fails to find any evidence that paternity leave affects mothers’ and fathers’ earnings. Rege and Solli (2010) estimate a DD model that exploits an exogenous variation in paternity leave in Norway provided by the introduction of a four-week paternity quota in 1993. They find that this paternity leave had a negative effect on fathers’ earnings. Cools et al. (2015) confirm this by combining an instrumental variable (IV) approach with the DD approach to obtain the causal effect of the same reform, and they find that the reform had a negative impact on the earnings and employment of mothers as well, both in the medium and long term. Ekberg et al. (2013) find that incentives have strong short-term effects on male parental leave uptake, but find no significant effect on parents’ long-term wages and employment. Furthermore, they find no significant effect on how parents split the household work, measuring the shares of household work by the shares of the leave taken for care of sick children. By contrast, Kotsadam and Finseraas (2011) apply a regression discontinuity (RD) approach to survey data to estimate the effect of the Norwegian parental leave reform and find that the “daddy quota” reduced conflicts over the division of household labor and led to more equal sharing of housework in the long run. In a recent study Patnaik (2015), estimates a DD model, using a policy reform in Canada, and finds that paternity leave had a large and persistent effect on domestic equality, as exposed fathers contribute more to home production, and exposed mothers spend more time at the

²One notable exception is Cools et al. (2015) who investigate the effect of the introduction of a four-week paternity leave in Norway in 1993 on various children’s and parent’s outcomes, including divorce when the children turn 14, but they find no significant effect.

workplace.

The second strand is the empirical literature on the causes and consequences of marital dissolutions. Recent studies have identified a number of factors that increase the probability of divorce. In addition to those discussed previously in this section—children, wives’ relative wages’ and wives’ labor market participation—negative financial shocks have been found to increase the probability of a divorce. Rainer and Smith (2010), for example, find that negative home-price shocks increase the risk of separations, and Rege and Solli (2010) find that plant closures significantly increase the risk of marital dissolutions among workers in the affected plants. In addition, Tjøtta and Vaage (2008) find that governmental support for children and for divorced families increases the probability of divorces, and Dahl and Moretti (2008) find that parents in the U.S. are more likely to divorce if their firstborn child is a girl than if it is a boy. Our study adds significantly to this literature by looking at a policy that affects divorce rates by incentivizing couples to change their division of labor in the household.

The rest of the paper is organized as follows: in Section 2 we discuss the theory of marital stability, in Section 3 we describe the institutional setting and the reform we are examining, in Section 4 we describe our data and the outcome variables under consideration, in Section 5 we present our empirical approach, and in Section 6 we present our main results. Section 7 concludes the paper.

2 Theory of Marital Stability

Becker (1973) was the first one to provide a theoretical framework for studying the institution of marriage, and Becker et al. (1977) were the first to provide a theoretical analysis of marital dissolution. Their economic approach to the family interprets such behaviors as childbearing, marriage, and divorce as active choices made by maximizing individuals. According to this view, the marriage institution is a highly efficient setup for individuals in which one partner specializes in market work while the other specializes in domestic work.

As a consequence, if partners “invade” each other’s territories, their specialization is reduced and the gains to be made from the marriage decline. Furthermore, the decision to stay married depends on a comparison between the utility associated with being married and the utility associated with the outside option of a divorce, so this decline reduces the desirability of staying married. Because men generally have greater attachment to the labor force and higher wages, whereas it is unavoidable that women take care of carrying and breastfeeding their children, the most stable marriages are said to be those in which the husband exchanges economic support for his wife’s household tasks, and vice versa. Some evidence has been offered in support of this view, showing that men and women have preferences for traditional gender roles and that a woman’s financial dependence on her spouse is itself an important contributor to marital stability; in particular, divorce is more likely if a woman’s income exceeds her husband’s (Bertrand et al., 2015; Heckert et al., 1998; Jalovaara, 2003; Liu and Vikat, 2004).

A growing literature looks at the role of gender identity on family formation and marital stability. Bertrand et al. (2015) show that societal norms, such as the idea that wives should not earn more than their husbands, affect the formation of marriages. Moreover, couples in which the wives earn more than the husbands tend to be less satisfied with their marriages and are more likely to divorce. Finally, women who earn more than their husbands have also been found to carry out a greater share of the household chores than women whose partners earn more than them. This contradicts the

Beckerian model, which holds that benefits of marriage stem from specialization and predicts a negative relationship between one's share of the household tasks and the share of the household income one provides.

However, a number of recent studies find that shared responsibility for bringing home the bacon makes relationships more robust. Cohabiting couples in the U.S. have been found to be more stable when the partners are more equal in terms of household chores and income (Brines and Joyner, 1999). Schoen et al. (2006) find that wives' full-time employment is associated with increased marital stability, and the findings of Sayer and Bianchi (2000) and Sayer et al. (2011) suggest that the economic independence of women is not the cause of marriage dissolutions but rather allows already unhappy wives to leave. Furthermore, Sigle-Rushton (2010) finds divorce rates to be lower in families in which husbands take a greater part in the housework, shopping and childcare.

Other empirical findings have also been used to cast doubt on the Becker (1973) model. Contrary to the model's predictions, people do engage in positive assortative mating by wages, other things equal, which suggests that the gains from marriage are not brought about just by specialization. Lam (1988) offers one explanation for this documented regularity. He develops a model in which the joint consumption of public goods is an important source of gains from marriage, and shows that this generates a tendency toward positive assortative mating by wages because spouses have similar demands for public goods.

The Beckerian model was heavily criticized by Oppenheimer (1994, 1997) on both theoretical and empirical grounds. She provides an alternative model, often referred to as the flexibility model, that makes different predictions about the effects of female employment on marital stability. One of her main criticisms is directed at the unrealistic assumption of lifelong employment, and she argues that a high degree of specialization puts relationships at risk because any temporary or permanent incapacity of a specialized agent would result in functions vital to the household not being carried out. In contrast with the Beckerian model, the flexibility model predicts that shared responsibility for both income and housework makes marriages more robust by reducing income risk and securing greater financial stability.

The inner workings of the household have changed considerably in the last decades, for multiple reasons. It has become easier to control pregnancy, there are more laborsaving devices in the home, and there is more work outside the home. This has led the share of married women in the U.S. who are employed to rise from 6% in 1900 to 30% in 1960 and 70% today. As a result, couples have more time and money, and it has become more important to individuals to have partners they enjoy sharing these with. It can therefore be argued that marriage today is fundamentally different from what it was 50 or 60 years ago. It has moved from a factory model in which husbands are breadwinners and wives are homemakers—that is, a model with production complementarities—to a hedonic model with consumption complementarities.

There have been other changes during this period. Stevenson and Wolfers (2007) have documented a declining trend in both marriages and divorces in the U.S. over the last 30 years, meaning that a greater proportion of today's marriages will remain intact 30 years into the future. This raises the question whether public-goods and risk-sharing channels are more important for marital stability than specialization, and whether greater equality among men and women makes for greater marital stability. However, the fact that gradual increase in equality among couples has coincided with a trend toward

more stable marriages does not mean that the former caused the latter. In this paper, we investigate whether such a causal link exists by taking advantage of an unexpected parental leave reform aimed at equalizing the labor market prospects and the childcare responsibilities of men and women.

The empirical evidence implies that although each of these theoretical models provide elegant ways of thinking about how these sources affects marriage and offers clear predictions of how different shocks will affect marital stability, the institution of marriage is more complicated and marital stability is probably affected through a number of channels. The expected effects of a policy that affects the division of labor in the household, on marital stability, therefore depend to a great extent on the framework used and the assumptions made.

2.1 Children, Fathers' Quota, and Marital Stability

In traditional economic models, children stabilize marriages. Becker (1991) views the production and rearing of children as the main purpose of marriages and families. Children are a long-term marital-specific investment and make specialization even more beneficial. The value of children is not fully realized if the marriage breaks up and children therefore make the value of marriage higher and thus make divorce more costly. Economic theory furthermore suggests that the more stable their marriage is, the more likely a couple is to invest in children and become parents (see, e.g., Becker, 1973; Becker et al., 1977; Weiss, 1997). Although a number of studies have found a positive correlation between children and marital stability, a recent analysis by Svarer and Verner (2008) shows that when correcting for couples' self-selection into parenthood, this relationship disappears. This suggests that the observed correlation is mainly due to happier couples having children, rather than children stabilizing marriages.

In contrast to economic theory, there is an extensive literature within psychology and sociology on the ways in which children decrease marital satisfaction and increase divorce risk. Twenge et al. (2003) summarize the explanations given for this negative association, which can be grouped into four theoretical models: (1) the role conflict model, (2) the restriction of freedom model, (3) the sexual dissatisfaction model, and (4) the financial cost model. According to the role conflict model, parenthood leads to a reorganization of social roles along more traditional lines. This can cause stress and conflicts when the parents do not prefer traditional roles, for example when the woman does not want to give up her career. The restriction of freedom model emphasizes the fact that children require time and attention, and that childcare responsibilities must interfere with and compete with the parents' pursuit of their own pleasures.³ In the sexual dissatisfaction model marital problems stem from the fact that the presence of children decreases the parents' opportunities for sexual intimacy, and in the financial cost model, children bring about marital conflicts through the stress they put on family finances. Empirically, Twenge et al. (2003) find that the restriction of freedom model and the role conflict model are the most important in explaining the destabilizing effect of children. The negative effect of children on marriages is more severe among high socioeconomic groups, younger birth cohorts, and in more recent years.

Introducing father's quota to a parental leave system increases domestic equality. Arnalds et al. (2013) use time use surveys to compare parents who had children before the policy reform in Iceland, to parents who had children after the reform, and find that children born after the change received

³The authors note that this is similar to the role conflict model in many ways and that empirically it can be difficult to separate the two mechanisms.

considerable more care from their fathers. Looking at a policy reform in Canada, Patnaik (2015) also finds that paternity leave had a large and persistent effect on domestic equality, as exposed fathers contribute more to home production, and exposed mothers spend more time at the workplace. In a Beckerian world, this would decrease the value of marriage, because specialization would be reduced. According to the flexibility model, however, the value of a marriage increases when the parents share their responsibilities more equally. Moreover, in the psychology models, in which children increase divorce risk, a fathers' quota is predicted to increase marital satisfaction and stability, and a policy that encourages fathers to participate in childcare may be of particular importance in the role conflict model.

3 Institutional Setup

3.1 The Parental Leave Scheme

In the year 2000, the Icelandic Act on Parental Leave underwent significant changes. A paternity quota was introduced to the country's paid parental leave beginning January 1, 2001. One month of the seven total months of paid parental leave was reserved exclusively for the father. This month was not transferable, so if it was not taken by the father the couple would lose it. Importantly, the right to parental leave in Iceland does not depend on the marital status, and a non-custodial parent has a right to maternity/paternity leave if the custodial parent consents (see Act on Maternity/Paternity Leave and Parental Leave No. 95/2000, Article 8), whereas even a sole custodian may not use the leave earmarked for the other parent.⁴

The new law makes it clear that gender equality was given serious consideration (Act on Maternity/Paternity Leave and Parental Leave, No. 95/2000) in its formulation. The law's stated main goals are (1) to ensure that children get to spend time with both parents and (2) to enable men and women to balance work and family life. Furthermore, even though this was not explicitly said to be a main goal, the law also mentions that the division of childcare between the parents is a prerequisite for their equality in the labor market.

The new paternity leave accompanied an increase in the total amount of parental leave from six to nine months. Iceland thereby gave men the largest non-transferable share of parental leave (three months out of nine) in the world. Parents who were active in the labor market were paid 80% of their average salaries while on leave.

Prior to this reform, there was a six month long paid parental leave. The first month of the leave could only be used by the mothers, while in theory the remaining five months could be divided between the parents as they preferred. Importantly though, fathers did not have a separate or independent right to paternity leave, and in practice, only a negligible percentage of parents used their right to share the parental leave under the old law.

The case of Iceland is quite unique even among the Nordic countries. First, although paid parental leave has a long history in the other Nordic countries, such laws were enacted much later in Iceland.⁵ Furthermore, as can be seen from Table 1 and Figures 1 and 2, the trend in Iceland when it comes to

⁴The only case in which the earmarked leave can be used by the other parent is when one of the parents dies before the child reaches the age of 18 months

⁵the first parental leave laws were enacted in 1901 in Denmark, in 1917 in Finland, in 1892 in Norway, and in 1900 in Sweden, but not until 1946 in Iceland.

parental leave has also deviated quite strongly from the other Nordic countries in recent years. For a long time, men took almost none of the parental leave (their share was 0.1% in 1995), but after the reform in 2001 the growth in men’s share of the total leave time has been quite steep. In 2000 their share was still fairly low (3.3%), but in 2001, after men received the non-transferable right to a one-month-long paternity leave, the percentage of total leave days used by fathers reached 11.5%. In 2002, men had the right to a two-month-long paternity leave, and their leave accounted for 19.6% of all parental-leave days used. In 2005, three years after men received the non-transferable right to a three-month-long paternity leave, this number had reached 32.7%. Since 2002, Icelandic men have used the largest share of total parental leave among men in the Nordic countries.

3.2 Households

In our analysis we do not differentiate between married and cohabiting couples, and a divorce is defined as the separation of parents, that were either married or cohabiting. There is little difference between cohabiting and married couples in the Nordic countries socially, culturally, or legally, and cohabitation is very common in all of them, including Iceland. At the time of the reform, 41% of individuals aged 25-40 were married, while 21% were cohabiting.

According to the OECD (2012), Iceland has the highest share of children born out of wedlock among the OECD countries, around 64%.⁶ This is not due to a high rate of teenage pregnancies, as the same report notes that Iceland falls in the middle of the ranking distribution of OECD countries for this. Numbers from Statistics Iceland show that cohabitation is common among people who have children. Between 2001 and 2006, 57% of firstborn children and 50% of second children were born to cohabiting parents, while the numbers born to married parents were 19% and 39%, respectively.

Fertility rates in Iceland are also high relative to other developed countries, as can be seen in Figure 3, and divorce and union dissolution are common.⁷ In 2001, 32.7% of divorces and terminations of cohabitation occurred among couples without children. Furthermore, most children are under the age of seven at the time of their parents’ divorce or termination of cohabitation. These numbers can be found in Tables 2 and 3.

4 Data

We use a rich register-based panel dataset comprising a sample of 600 Icelandic families who had children in the three months before and the three months after the first change to the parental leave system – that is, from October 2000 through March 2001. Due to restrictions at Statistics Iceland, our sample is drawn randomly from parents who were married or cohabiting and neither unemployed nor self-employed when the child was born. The data covers about 30% of all childbirths in the country during this period. For the purpose of performing a placebo analysis, a comparable sample of families who had children in the same months of a different year is included in our data.

For our sample we compiled data of income and demographic characteristics from Statistics Iceland into a panel covering the parent in our sample over a period of 21 years (1990-2010). The demographic

⁶Out-of-wedlock births are defined as those in which the parents are neither married nor living in a comparable legal partnership during the year in which the birth occurs.

⁷According to Statistics Iceland, the incidence of divorces among married individuals in 2000, just before the reform, was 40% . In 2011, the incidence was 34%.

data includes information on age, gender, marital status, education, dummies for whether the individual lives in the capital city or other urban areas, the number of children the individual has in different age categories, and spouse identifiers. The education variable specifies the highest level of education the individual has completed, whether this is compulsory education, high school, or university. Income is reported by individual source and is divided into three categories: income from employment, capital income, and other income.

Our data are taken from the Icelandic Longitudinal Income Database (ICELID), maintained by Statistics Iceland, which has gathered it from different sources, mainly administrative registers. Because Icelandic residents are taxed on their income Statistics Iceland has a parliamentary mandate to collect extensive information on the finances of every individual in the country. Because the data are collected by a single, central agency, and are used for tax purposes, we believe that our data set is of a very high quality. Furthermore, because the data are register-based and cover a large and representative sample of the population, results drawn from them will not be influenced by self-selection biases.

Table 4 provides summary statistics on the variables we use in this study. We show separate statistics for men and women in the treatment group (columns (i) and (ii)) and the control group (columns (iii) and (iv)).

5 Difference-in-Differences Analysis of Divorce Risk

To estimate the intention-to-treat effect of the parental leave reform on marital stability we employ a difference-in-differences (DD) strategy laid out in this section. When evaluating the effects of the paternity leave, we distinguish between parents who had children just before the reform and just after the reform of the parental leave policy took effect in 2001. Our outcome variable is marital status for individual i at time t is denoted Y_{it} . The outcome variable takes value 1 if the couple has separated 0 if they are still married or cohabiting. We let $T = 1$ for those individuals who had a child from January through March of 2001 and $T = 0$ for those who had children from October through December of 2000. As explained in Section 3.2, we treat cohabiting parents as married, since there is negligible difference between marriage and cohabitation in Iceland. Throughout the paper, we therefore use the terms divorce and separation interchangeably.

The simple DD estimator compares the change in the outcome variable for a parent when the father is entitled to paternity leave with the change in the outcome variable for a parent when the father is not entitled to paternity leave. The implicit identifying assumption is that if the reform of the parental leave scheme had not taken place, the change in the outcome variable would have been the same for both groups of parents. Formally, that is,

$$E[Y_{i,t=0}^0 - Y_{i,t=1}^0 | T = 1] = E[Y_{i,t=0}^0 - Y_i^0 | T = 0] \quad (1)$$

where Y_i^0 is the outcome variable when the father does not receive paternity leave. This cannot be tested directly, though, as Y_i^0 is unobserved for $T = 1$. However, we evaluate the credibility of the assumption by looking at the marital status of couples in the control group and the treatment group in the decade before the policy change (see Figure 5). By definition, the share is 100% at the time of the policy change for both groups, because the sample was drawn from couples that were married or

cohabiting at the time of the birth. The graph supports our identification assumption as the groups look identical in the decade before the policy change, but diverge immediately afterward.

The unconditional DD estimator is given by:

$$E[Y_{i,t=0} - Y_{i,t=1}|T = 1] - E[Y_{i,t=0} - Y_{i,t=1}|T = 0] \quad (2)$$

We also control for additional background variables using a regression framework to generalize specification (2). Let $after = \mathbb{I}(t > t_b)$ denote the indicator of whether the observation is made after the couple had a child. In the analysis we look at the couples five, and ten, years after giving birth. The DD estimator of the intention-to-treat effect of the paternity leave is the estimated coefficient γ_{DD} to $after \times T$ in the following OLS regression of the outcome variables Y_i on T , $after \times T$ and various control variables

$$Y_{it} = \gamma_0 + \gamma_1 T + \gamma_2 after + \gamma_{DD}[after \times T] + X_i \delta + \epsilon_{it} \quad (3)$$

where X_{i0} is the vector of additional control variables measured before treatment, and ϵ_{it} is the unobserved idiosyncratic variation in outcomes across individuals and the treatment group. Since all couples in our sample are married or cohabiting at the time of the birth, i.e., when $after = 0$, the outcome is 0 for all couples, the estimation equation can be simplified to the following:

$$Y_{i,t=1} = \gamma_0 + \gamma_{DD} T + X_i \delta + \epsilon_{i,t=1} \quad (4)$$

As described in the section on the parental leave scheme, evidence points towards a strong effect on parental leave uptake. However, there are fathers who forgo the earmarked paternity leave. Since the treatment effect is estimated on the full sample, it may give a lower bond estimate of the actual effect of the parental leave on marital stability.

5.1 Threats to Identification

There is a trade-off between having groups that are as similar as possible (obtained by reducing the time window around the reform) and having a larger sample size (by widening the window). We therefore report our findings for several time windows: i.e., we report results for families who had children one, two, and three months before and after the reform.

One threat to the identification of causal effects is endogenous sorting: parents may have planned the time of birth in anticipation of the policy. According to the Directorate of Health, births in Iceland have a standard deviation of 12 days: within a 12-day window, the timing of any given birth is unpredictable and therefore cannot bias the treatment effect. Unfortunately, our data do not allow a proper test for endogenous sorting, because we do not have sufficiently detailed information on the dates of birth – in fact, given the size of Iceland’s population, our sample size would be extremely small if we did have the date of birth and used only a 12-day window. Instead, we examine the number of children born in Iceland and find no spike at the implementation of the paternity leave. This can be seen in Figure 4.

It can also be argued that endogenous sorting should not pose a problem in this case because the policy process was completed so quickly. The new bill on parental leave was passed by Iceland’s parliament on May 9, 2000 and came into effect on January 1 2001, so parents who gave birth around the

time it took effect could not have known about it at the time of conception. More specifically, children conceived on the day that the bill was passed were not born until mid-February of 2001. Given the standard deviation of gestational age, we can be sure that results obtained using a one-month window around the reform were not contaminated by endogenous sorting.

Furthermore, it is evident from news coverage that the new law did not reach widespread public awareness until the late fall of 2000, and there appears to have been a substantial level of uncertainty with regards to the implementation of the reform. This adds further support to our choice of treatment group because it implies that it is unlikely that couples had endogenously sorted themselves into parenthood by March of 2001.

Another concern, is that even without the parental leave reform, parents who have their children at the end of the year are different from parents who have their children early in the year. In their study, Buckles and Hungerman (2013), find that maternal characteristics vary by the month of birth. Mothers who give birth during the winter months are younger, less likely to be married, and less educated, than mothers who have their children at other time or the year. We take several measures to address this.

First, in order to know whether the parents in our control group, and our treatment group resemble each other on potentially confounding variables, we compare the mean values of these variables for the two groups of parents in Table 4. The treatment and control groups do not differ on any observable characteristics other than elementary education among women, and the sample selection appears successful in minimizing confounding factors.

Second, since the groups may still differ on unobservable characteristics we use data from the previous year to look at a placebo treatment effect, i.e., we estimate Equation (4), using births around 1st of January, 2000, i.e., when no parental leave reform took place. We also estimate a difference-in-differences model using parents who had their children in January-March 2000, as the control group. This enables us to get rid of the potential month of birth effect.

Finally, we use our placebo sample, i.e., the sample that had a child around the 1st of January 2000, and the sample that had a child around the policy reform (1st of January 2001) to estimate the following difference-in-difference-in-differences (DDD) equation:

$$\begin{aligned}
Y_{i,t=1} = & \gamma_0 + \gamma_1 T + \gamma_2 \text{NotPlacebo} + \gamma_3 \text{After} + \gamma_4 [\text{After} \times T] \\
& + \gamma_5 [\text{NotPlacebo} \times T] + \gamma_6 [\text{After} \times \text{NotPlacebo}] \\
& + \gamma_D DD[\text{After} \times T \times \text{NotPlacebo}] + X_i \delta + \epsilon_{i,t=1}
\end{aligned} \tag{5}$$

where *NotPlacebo* is a dummy variable that takes value one if the birth is around the policy change, i.e., 1st of January 2001, and zero if the birth is in the months before and after 1st of January 2000. Since all couples are together at time 0, we can rewrite the equation as:

$$Y_{i1} = \gamma_0 + \gamma_1 T + \gamma_2 \text{NotPlacebo} + \gamma_D DD[\text{NotPlacebo} \times T] + X_{i0} \delta + \epsilon_{i1} \tag{6}$$

The DDD analysis gives us a more robust estimate of the treatment effect by addressing both the concern that divorce trends may be different among parents who have children at the end of the year, than among those who have children in the beginning of the year, and the concern that there is a difference between the group that had a child around 1st of January 2000, and those who had a child

around 1st of January 2001.

6 Results

The first change in the parental leave system took place on January 1, 2001, when the total leave was extended from six months to seven, with one of the seven months earmarked to the father. The following section details our results, using a sample of 600 families that had children in the three months before and three months after this cutoff date.

6.1 Graphical Illustrations

Figure 6 shows the evolution of relationship stability in couples that had a child within a three-month time window around the implementation of the parental leave reform in 2001 and those that had a child within the same window the previous year. The couples that had a child after January 1, 2001, were entitled to paternity leave, while those who had a child before were not. There are some noteworthy patterns. The graph suggests that paternity leave is associated with a reduction in the number of divorces immediately after the child is born. This is also the period when most divorces takes place, as can be seen in Table 2. Figure 6 also shows that this is not just a transitory drop in the divorce rate but rather appears to be a permanent one, as the difference in the proportion of couples divorced remains throughout the ten-year period that we follow them.

When we compare (a) those who were entitled to a paternity leave to those who had a child in the same period the year before, and (b) those who had a child just before the reform to those who had a child in the same period the year before, we find added support for our conclusion that the paternity leave reduced the number of divorces among people who were entitled to it. Looking at the share of couples that divorced within ten years after their child was born, we see that there are fewer divorces among those entitled to paternity leave than among those who had a child in the same period the year before. Comparing parents who had a child just before the reform to those who had a child in the same period the year before, reveals no such difference.

6.2 The Effect on Marital Stability

In Table 5, we present our results estimating the effect of the introduction of the paternity leave on marital stability. More specifically, we look at the probability that parents are separated, comparing the couples whose children were born just after and just before the law changed. The results presented in the paper are based on the estimation of a linear probability model.⁸

Our results imply that if the couples who had children just before the reform would also have had the opportunity for one month of paternity leave, the number of divorces in the next ten years would have been significantly lower. To be more specific, five years after the birth of the child, the effect is large and significant, showing that if the control group had had access to the same paternity leave, the divorce rate in that group would have been six to twelve percentage points lower. Ten years later, parents who had their children after the policy reform were still less likely to be divorced or separated. The coefficients indicate that the divorce rate in the control group could have been decreased by three to eight percentage points, although the impact is only significant in specifications (iii) and (iv).

⁸Our findings are robust to estimating a logit or a probit, model instead.

To address the concern that our findings are due to seasonality in the data, or due to unobserved difference between parents who have children in the beginning of the year, and at the end of the year, we repeat the regressions we carried out in Table 5, as if the reform had taken place exactly one year earlier. The difference between the two groups turns out to be negligible and not significant under any specification (see Table 6). This implies that our estimated effect of the introduction of a father’s quota in Table 5 can plausibly be interpreted as causal relationships.

Figure 6 suggests that an alternative way of estimating the treatment effect is to use the births from January through March of 2000 as the control group, i.e., parents that had their children in the same months as the treatment group, but one year earlier. In the figure we can see that the divorce patterns for parents who had children in October-December 1999 and in October-December 2000 are identical, meaning that the difference between the treatment and the placebo treatment groups is likely to be due to the parental leave reform. In Table 7 we compare our treated sample to this alternative control group, and find that the paternity leave reduced the share of divorced parents between 5.2, and 7.8, percentage points when we look at the parents five years after the birth of their child, and between 4.3, and 7.3, percentage points ten years after the birth of their child.

Figure 6 also indicates that a DDD estimation may be appropriate using the four different groups. In Table 8 we estimate equation (6). Given our sample size, it is not surprising that the estimation does not yield significant result. However, the coefficients are comparable to the coefficients in Table 5 and Table 7, albeit slightly smaller, and the change in significance is largely due to bigger standard errors. If we interpret the point estimates as the treatment effect, the DDD analysis suggests that the paternity leave reduced divorce probability by between 2.8 and 8.4 percentage points when we observe the couples five years after the birth of their child, and between 1.8 and 4.8 percentage points when we look at the couples ten years after the birth of their child.

6.3 Heterogeneity in the Effect

Our hypothesis is that the paternity leave affected marital stability as it increased domestic equality, and therefore alleviated the shock on the division of labor within households that takes place when couples have children. If this is the case the main effect should come from first-time parents. Our sample is too small to isolate the effect on only first-time parents, but in Table 9 we separate the effect by parents by the length of their experience as parents, i.e., we look at parents who had no child above seven years of age, and those who have at least one child seven years old or older.⁹ There two groups look similar five years after the introduction of the paternity leave. In contrast, when we look at the parents ten years after the birth of their child, the main effect is indeed on the parents who had their first or second child around the policy change, where the divorce probability is reduced by around ten percentage points. Among the more experienced parents, on the other hand, the estimated effect on divorce probability is not significantly different from zero.

Another implication of our hypothesis is that the positive effect of the paternity leave on marital stability, should be strongest among parents who aim for equal division of labor at home, rather than those who prefer to specialize. We have no information on parents’ preferences but in Table 10 we separate parents by their relative education, i.e., we look separately at parents who have the same level

⁹We do not have the exact age of other children in the household in our data. Statistics Iceland has constructed two variables that give us the number of children in the household in these two age categories, i.e., below 7 years old, and 7 years old or older.

of education (columns (i) and (ii)), parents' where the mother has higher level of education (columns (iii) and (iv)), and parents where the father has higher level of education (columns (v) and (vi)). The idea is that education as a rough measure of labor market specialization. For parents who have the same level of education, the effect is strong and significant, both five years and ten years after the birth, i.e. for this group, having access to paternity leave reduces divorce risk by ten to twelve percentage points. Among parents with the same level of education, 34 % are separated ten years after the birth of their child. According to the point estimates, the daddy month could have reduced the ratio to 22-24 %. The other groups have fewer observations, and the results are not statistically significant. However it is worth noting that among couples where the wife has higher level of education, the coefficients also suggest a decrease in divorce probability. In contrast, the results for the sample where fathers have higher level of education than the mothers imply an increase in divorce probability.

7 Conclusions

Parental policy has been under debate in recent years. With the growing number of dual-earner families in the US, there has been an increased demand for a universal paid parental leave. There is little agreement, though, on the optimal system in terms of length, form, or payments. While longer maternity leaves have been found to increase women's labor market participation, they have also been found to have a negative effect on women's earnings (Ruhm, 1998), and still other papers suggest that this only holds in the short run (Lalive and Zweimüller, 2009; Lalive et al., 2013). In response to this evidence, and in an attempt to narrow the gender gap in the labor market, several countries have earmarked part of their parental leave for fathers. Families have to forgo this parental leave if it is not used by the father, which creates strong economic incentives for fathers to take part in caring for their children during their first months. However, few attempts have been made so far to evaluate how well these policies work. Furthermore, the main emphasis in evaluations of parental leave policies has so far been on labor market outcomes, for example, wages and labor market participation. Our results show that the impact of such policies is not restricted to labor market outcomes.

We find that the addition of one month of paternity leave to an existing six-month parental leave in Iceland significantly decreased divorce rates. Parents who had their children right after the policy was implemented were considerably less likely to divorce than parents who had their child just before the paternity leave was introduced. The effect is sizable and indicates that if the control group had been subject to the new parental leave policy, their rate of separations within the following five years would have been reduced by around thirty percent. Even ten years after the birth of their children, there is still a substantial difference between couples in the two groups, indicating that around twenty percent of the separations in the control group would have been avoided had their children been born after the reform took effect. These results suggest that engaging fathers in childcare has a substantial long-term effect on marital stability.

The effect of the paternity leave on marital stability is particularly strong among less experienced parents. It is well established that the presence of young children is a risk factor for marital dissolution, and a number of studies have found that having children significantly decreases marital happiness, and increases divorce risk (Svarer and Verner, 2008; Lawrence et al., 2007, 2008). The adverse effect of children on marriage is mainly found among less experienced parents, i.e., parents who just had their first, or second child. Couples who have more experience, and whose relationship has already survived

two children or more, are less at risk. It is therefore not surprising that the less experienced parents are those who benefit most from the fathers' quota.

We also find that the effect of the paternity leave is especially strong among parents where the mother's education is equal to, or greater education than, the father's. In contrast, the effect on couples, where the father has higher level of education than the mother, is negligible. In societies where women are becoming more career oriented, a parental leave system, that encourages both parents to participate, may decrease the divorce risk by easing couples' transition into parenthood. Women have significantly increased their education levels and labor market participation in recent decades, but have at the same time remained the main caretakers in the household. In particular, when children are born, couples often reorganize their social roles towards more traditional family patterns according to which men are the breadwinners and women take care of the home and children. This shift in household responsibilities is likely to be more dramatic and cause more stress and conflicts, among couples where specialization is not expected.

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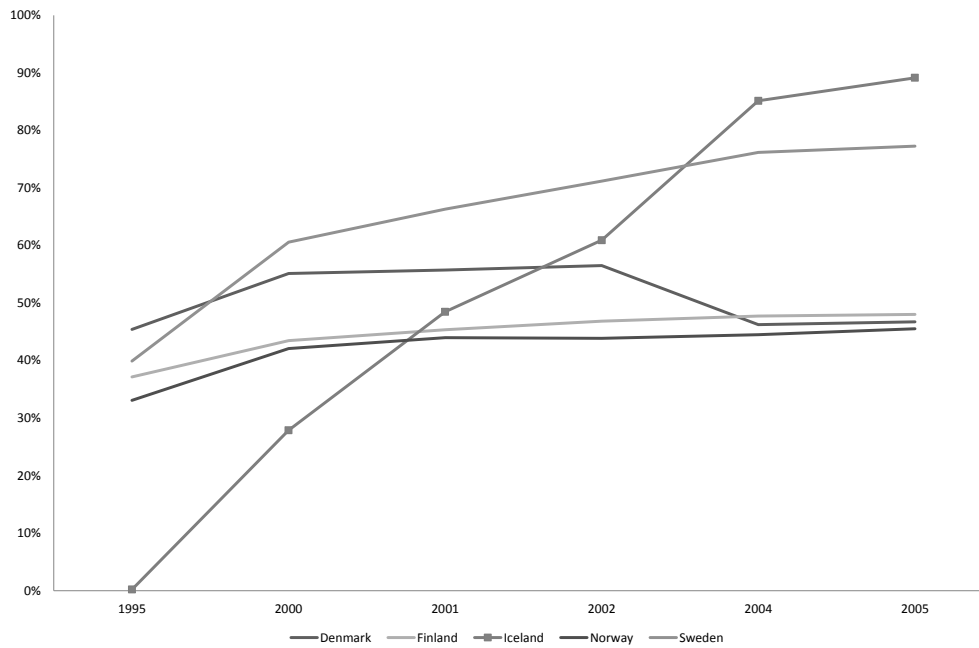


Figure 1: Number of people receiving parental leave in the Nordic countries, share of men relative to women

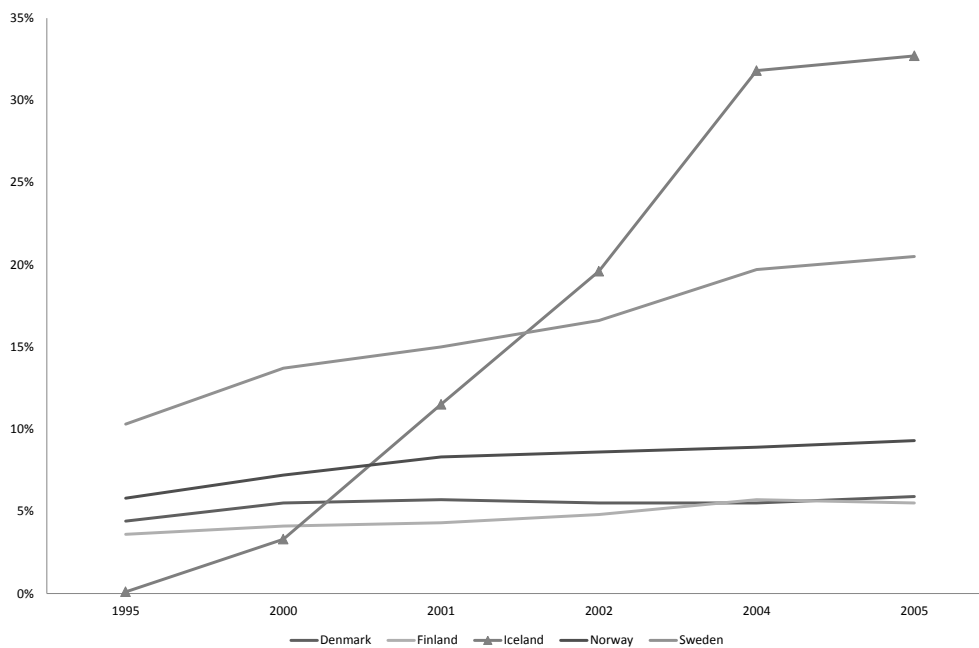


Figure 2: Share of parental leave days used by men in the Nordic countries



Figure 3: Fertility in Iceland 1990-2010

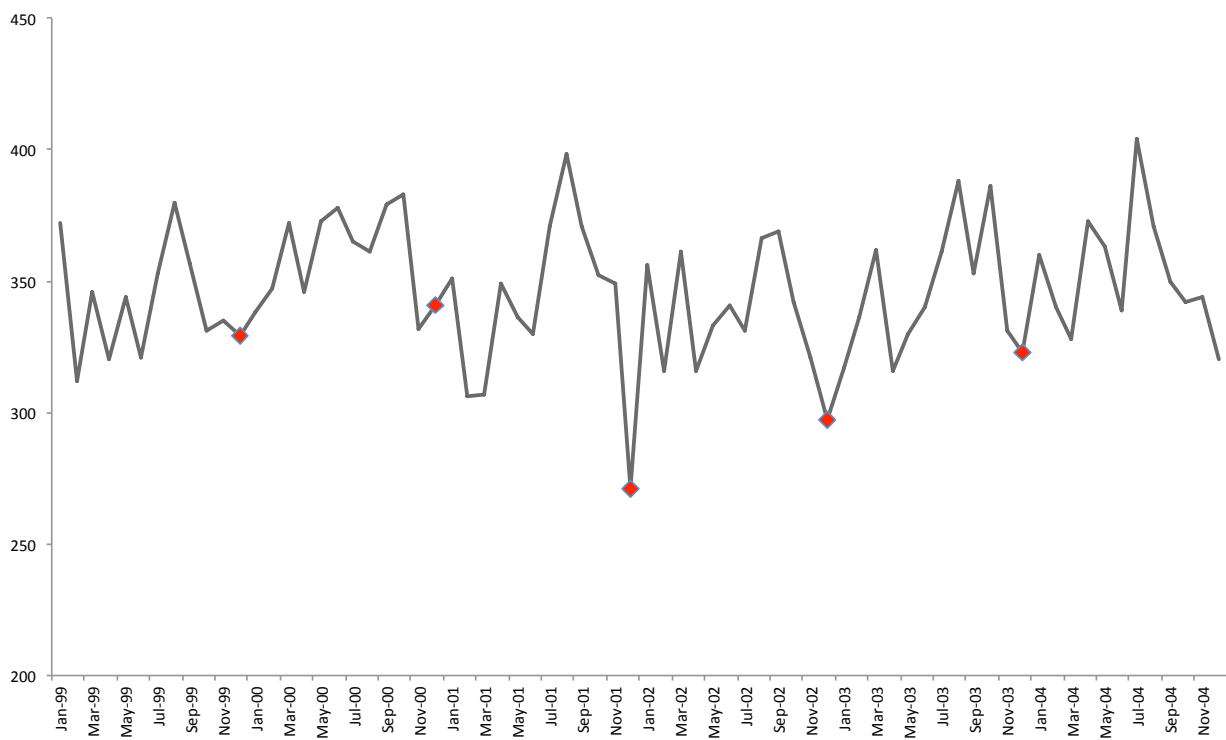


Figure 4: Monthly fertility in Iceland 1999-2004

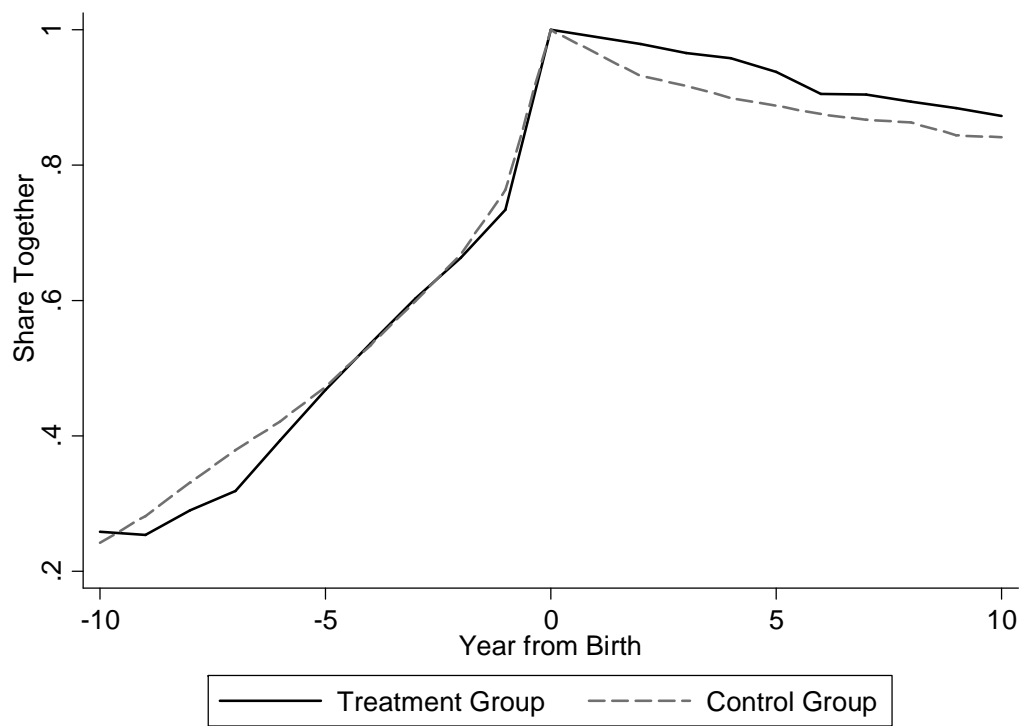


Figure 5: Comparison of relationship status for couples who had children during the 3 months before and 3 months after the reform.

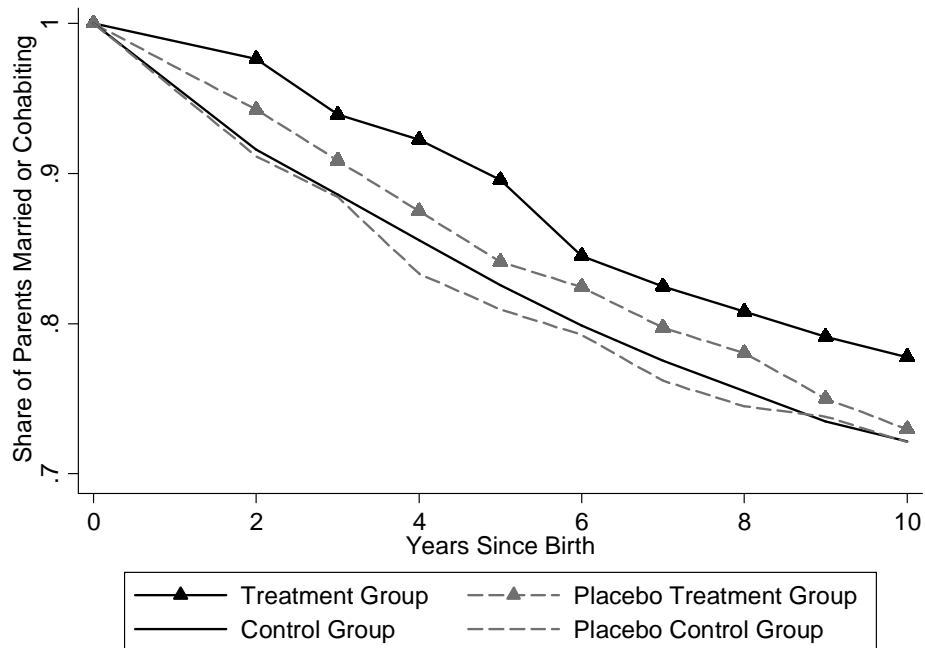


Figure 6: Comparison of relationship stability for couples who had children during the 3 months before and 3 months after the reform and for the placebo group that had children in the same months, 1 year earlier. The first solid line shows the proportion of couples that had a child in the 3 months after the reform that are together at each point in time while the solid line below shows the proportion of couples that had a child in the 3 month prior to the reform that are still together. The dotted lines represent couples that had a child during the same time of the year but one year earlier.

Table 1: Number of people receiving benefits on the basis of pregnancy, birth or adoption in 1995-2005

	Denmark	Finland	Iceland	Norway	Sweden
Men					
1995	41 003	40 267	10	25 166	130 786
2000	45 559	42 294	1 421	33 806	166 661
2001	45 372	43 590	2 840	35 096	186 177
2002	44 897	44 624	3 816	34 505	210 000
2004	46 447	46 947	5 625	36 214	242 572
2005	47 158	47 554	5 871	36 811	251 629
Women					
1995	90 335	108 429	5 066	76 088	327 846
2000	82 657	97 359	5 097	80 368	275 214
2001	81 440	96 135	5 861	79 835	280 856
2002	79 481	95 277	6 266	78 703	295 000
2004	100 459	98 404	6 608	81 408	318 480
2005	100 915	99 067	6 587	80 894	325 774
Share of men in relation to women					
1995	45%	37%	0%	33%	40%
2000	55%	43%	28%	42%	61%
2001	56%	45%	48%	44%	66%
2002	56%	47%	61%	44%	71%
2004	46%	48%	85%	44%	76%
2005	47%	48%	89%	46%	77%

Source: NOSOSCO (2004), NOSOSCO (2006), NOSOSCO (2007). The book Social Protection in the Nordic Countries (NOSOSCO), published every year, contains information about the number of men and women who utilize their right to parental leave to some extent.

Table 2: Divorces, dissolutions of consensual unions and number of children 1991-2011

	No children	1 child	2 children	3 children	4 children or more
1991	32.3%	44.1%	17.4%	5.2%	1.0%
1992	35.5%	39.0%	19.7%	5.2%	0.6%
1993	37.7%	38.7%	17.3%	5.6%	0.7%
1994	35.6%	39.5%	20.5%	3.3%	1.1%
1995	36.7%	39.4%	17.1%	5.9%	1.0%
1996	37.7%	38.5%	18.4%	4.6%	0.8%
1997	37.6%	38.8%	18.2%	4.2%	1.3%
1998	36.5%	38.4%	19.3%	5.2%	0.7%
1999	37.6%	37.8%	18.7%	5.0%	0.9%
2000	35.3%	36.7%	21.0%	6.0%	1.0%
2001	32.7%	38.0%	22.0%	6.2%	1.1%
2002	36.2%	35.8%	21.1%	5.5%	1.4%
2003	37.4%	34.1%	22.4%	5.2%	0.8%
2004	39.9%	30.7%	22.2%	6.2%	1.0%
2005	41.0%	31.5%	19.7%	6.6%	1.2%
2006	37.5%	32.8%	22.5%	6.4%	0.8%
2007	38.6%	30.8%	21.6%	7.0%	1.1%
2008	35.1%	35.7%	22.4%	5.2%	0.7%
2009	39.9%	32.3%	20.7%	6.1%	1.0%
2010	35.9%	35.0%	22.8%	5.6%	0.8%
2011	38.1%	34.5%	21.4%	5.0%	0.9%

* Divorces and dissolutions of consensual unions by the number of children in the household.

Table 3: Age of children at the time of divorce or dissolution of consensual unions

	<1	1	2	3	4	5	6	7	>7
1994	9.9%	13.2%	8.6%	7.2%	6.9%	6.4%	5.8%	5.9%	36.1%
1995	10.3%	13.6%	9.3%	9.0%	7.3%	7.8%	5.5%	5.1%	32.1%
1996	8.7%	11.3%	9.1%	9.7%	7.7%	7.5%	6.7%	5.5%	33.8%
1997	9.7%	11.5%	10.7%	9.7%	7.9%	7.0%	6.7%	4.9%	31.9%
1998	9.8%	13.2%	9.9%	8.1%	8.5%	6.7%	6.5%	6.0%	31.3%
1999	8.2%	11.8%	9.6%	8.7%	9.1%	6.3%	7.0%	4.7%	34.7%
2000	8.8%	11.0%	10.5%	8.2%	7.1%	5.7%	6.2%	6.1%	36.4%
2001	9.7%	11.6%	9.4%	7.3%	7.3%	6.3%	4.9%	5.2%	38.4%
2002	7.9%	9.8%	9.0%	9.8%	6.7%	5.8%	6.0%	6.9%	38.2%
2003	6.8%	10.9%	8.6%	8.2%	7.4%	6.1%	6.0%	6.7%	39.3%
2004	6.4%	9.9%	9.4%	6.7%	7.4%	6.3%	4.8%	5.5%	43.7%
2005	4.5%	7.9%	9.3%	7.4%	7.0%	7.0%	6.5%	5.2%	45.2%
2006	5.3%	8.7%	9.6%	8.6%	6.5%	6.7%	5.8%	5.3%	43.5%
2007	5.5%	9.9%	9.0%	7.0%	7.4%	6.8%	5.6%	6.3%	42.6%
2008	7.2%	8.9%	8.1%	8.7%	6.1%	7.5%	5.2%	6.8%	41.5%
2009	7.9%	8.9%	9.7%	7.1%	7.1%	6.2%	5.0%	4.9%	43.3%
2010	4.9%	9.1%	8.4%	9.0%	6.9%	6.2%	6.1%	5.9%	43.4%
2011	6.3%	11.2%	8.0%	10.0%	6.7%	6.5%	5.8%	5.4%	40.0%

* Divorces and dissolutions of consensual unions by the age of children in the household.

Table 4: Summary Statistics

	Treatment group		Control group		Difference	
	Men (i)	Women (ii)	Men (iii)	Women (iv)	Men (v)	Women (vi)
Birth year	1968.3	1970.1	1968.0	1970.6	0.3	0.5
Education	1.45	1.31	1.46	1.36	0.01	0.05
Elementary school	0.20	0.21	0.18	0.15	0.02	0.04**
High school	0.30	0.18	0.30	0.15	0.00	0.03
University	0.22	0.26	0.23	0.29	-0.01	-0.03
No education or missing	0.29	0.35	0.30	0.41	0.01	0.06
Urban dummy	0.86	0.86	0.85	0.85	0.01	0.01
#children < 7 years	1.51	1.51	1.55	1.55	-0.04	-0.04
#children > 7 years	0.39	0.39	0.36	0.36	0.03	0.03
First child dummy	0.38	0.38	0.40	0.40	-0.02	-0.02
Earnings 1999	2,553,455	1,258,256	2,595,392	1,200,532	-41,937	57,724
Capital income 1999	110,539	85,433	96,845	63,337	13,694	22,097
Couple's earnings gap 1999	1,249,988	1,249,988	1,431,684	1,431,684	-181,696	-181,696
Divorced 2002	0.02		0.08		0.06***	
Divorced 2003	0.07		0.11		0.04**	
Divorced 2004	0.08		0.14		0.06***	
Divorced 2005	0.10		0.17		0.07***	
Divorced 2006	0.15		0.20		0.05*	
Divorced 2007	0.18		0.22		0.04*	
Divorced 2008	0.19		0.24		0.05*	
Divorced 2009	0.21		0.27		0.06*	
Divorced 2010	0.22		0.28		0.06*	
#observations	297	297	298	298		

Note: * p<0.1 ** p<0.05 *** p<0.01

Table 5: The Effect of Paternity Leave on Parental Separations (Linear Probability Model)

window	3 months		2 months		1 month	
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
5 years after birth	-.070** (0.028)	-.060** (0.028)	-0.089*** (0.034)	-0.083** (0.034)	-0.123** (0.053)	-0.097* (0.053)
10 years after birth	-0.056 (0.036)	-0.052 (0.035)	-0.076* (0.043)	-0.081* (0.043)	-0.046 (0.064)	-0.029 (0.065)
Number of observations	595	595	410	410	200	200
Controls	no	yes	no	yes	no	yes

The outcome variable is a dummy variable indicating whether parents are divorced five years or ten years after having a child, i.e., in 2005 and 2010. The 1, 2 and 3 month samples include all observations that are in the range of $[-1, 1]$, $[-2, 2]$ and $[-3, 3]$ of the paternity leave reform. Controls include mothers' and fathers' year of birth, education, income in 1999, number of older children in the household, and an urban dummy. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Table 6: The Placebo Effect on Parental Separations (Linear Probability Model)

window	3 months		2 months		1 month	
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
5 years after birth	-0.032 (0.032)	-0.027 (0.034)	-0.052 (0.041)	-0.027 (0.045)	-0.054 (0.062)	-0.010 (0.069)
10 years after birth	-0.005 (0.038)	-0.004 (0.039)	-0.043 (0.048)	-0.028 (0.051)	-0.005 (0.071)	0.003 (0.077)
Number of observations	590	590	382	382	186	186
Controls	no	yes	no	yes	no	yes

The outcome variable is a dummy variable indicating whether parents are divorced five years or ten years after having a child, i.e., in 2004 and 2009. The 1, 2 and 3 month samples include all observations that are in the range of $[-1, 1]$, $[-2, 2]$ and $[-3, 3]$ of the 1st of January 2000. Controls include mothers' and fathers' year of birth, education, income in 1998, number of older children in the household, and an urban dummy. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Table 7: The Effect of Paternity Leave on Parental Separations - Alternative Control Group

window	3 months		2 months		1 month	
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
5 years after birth	-0.055** (0.028)	-0.052* (0.028)	-0.067** (0.034)	-0.063* (0.035)	-0.078 (0.051)	-0.072 (0.056)
10 years after birth	-0.050 (0.035)	-0.044 (0.036)	-0.055 (0.043)	-0.045 (0.043)	-0.073 (0.067)	-0.066 (0.070)
Number of observations	593	593	402	402	192	192
Controls	no	yes	no	yes	no	yes

The outcome variable is a dummy variable indicating whether parents are divorced five years or ten years after having a child. The 1, 2 and 3 month samples include all births 1,2, or 3 months after 1st of January 1999 (control group) and 1st of January 2000 (treatment group). Specifications (i)-(iv) include month of birth dummies. Controls include mothers' and fathers' year of birth, education, income in 1998, number of older children in the household and an urban dummy.
* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Table 8: The Effect of Paternity Leave on Parental Separations - DDD

window	3 months		2 months		1 month	
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
5 years after birth	-0.038 (0.042)	-0.028 (0.042)	-0.051 (0.052)	-0.057 (0.052)	-0.079 (0.080)	-0.084 (0.079)
10 years after birth	-0.046 (0.051)	-0.035 (0.050)	-0.038 (0.064)	-0.049 (0.062)	-0.018 (0.096)	-0.031 (0.095)
Number of observations	1185	1185	792	792	386	386
Controls	no	yes	no	yes	no	yes

The outcome variable is a dummy variable indicating whether parents are divorced five years or ten years after having a child. The 1, 2 and 3 month samples include all births 1,2, or 3 months before and after 1st of January 1999 and 1st of January 2000. All specifications include month of birth dummies. Controls include mothers' and fathers' year of birth, education, income in 1998, number of older children in the household, and an urban dummy.

* p<0.1 ** p<0.05 *** p<0.01

Table 9: The Effect of Paternity Leave on Parental Separations - by the presence of older siblings

sample	no children > 7 years		at least one child > 7 years	
	(i)	(ii)	(iii)	(iv)
5 years after birth	-0.080** (0.035)	-0.068** (0.035)	-0.047 (0.047)	-0.052 (0.047)
10 years after birth	-0.112*** (0.042)	-0.104** (0.042)	0.081 (0.064)	0.068 (0.069)
Number of observations	423	423	172	172
Controls	no	yes	no	yes

The outcome variable is a dummy variable indicating whether parents are divorced five years or ten years after having a child, i.e., in 2005 and 2010. The samples include all observations that are in the range of $[-3, 3]$ of the paternity leave reform. Controls include mothers' and fathers' year of birth, education, income in 1999, number of older children in the household, and an urban dummy. * p<0.1 ** p<0.05 *** p<0.01

Table 10: The Effect of Paternity Leave on Parental Separations - by parents' education

Parents' Education	Fathers = Mothers		Fathers < Mothers		Fathers > Mothers	
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
5 years after birth	-0.128*** (0.045)	-0.113*** (0.043)	-0.083 (0.060)	-0.047 (0.041)	0.019 (0.060)	0.032 (0.046)
10 years after birth	-0.108** (0.055)	-0.102* (0.041)	-0.059 (0.070)	-0.040 (0.073)	0.020 (0.062)	0.041 (0.063)
Number of observations	270	270	137	137	188	188
Controls	no	yes	no	yes	no	yes

The outcome variable is a dummy variable indicating whether parents are divorced five years or ten years after having a child, i.e., in 2005 and 2010. The samples include all observations that are in the range of $[-3, 3]$ of the paternity leave reform. Controls include mothers' and fathers' year of birth, education, income in 1999, number of older children in the household, and an urban dummy.

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$