

WORKING PAPER 2023:1

Fathers who do not use parental leave

A register-based analysis of Swedish fathers to children born between 1994 and 2017

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Abstract

Since the mid-1990s, most fathers in Sweden use parental leave, albeit for shorter durations than mothers. One major reason why most fathers use parental leave is the reserved month, often called the daddy's month, which was introduced in 1995. The reserved month is based on a "use it or lose it" principle. Since the 1990s, two more months are reserved for each parent. In parallel, the share of using fathers has steadily increased to about 85 percent today.

In this study we investigate which fathers are non-users, which use less than one month, and whether these groups have changed from the mid-1990s and up to 2017. The analysis is done with administrative register data of all fathers to children born in Sweden between 1994–2017.

The results show that one third of the children born in 2017 have a father who used less than a month of parental leave, which in the Swedish context can be regarded as a very low uptake. However, the proportion of fathers using no days has changed over time. When the first reserved month was introduced, 26 percent of fathers used no days. Among children born in 2017, 18 percent used no days. Also, the proportion of fathers using 1–29 days has changed, from 29 percent for children born in 1995 to 15 percent for children born in 2017.

We also find that the groups most likely not to use any days of parental leave are fathers with a low income, fathers with a low education, self-employed fathers, and fathers not in paid work, fathers working in the private sector, fathers with three or more children, and foreign-born fathers. We also find that the gap in the use of no days between low and high educated fathers has increased over time. The patterns found in fathers' leave uptake are discussed in relation to the regulatory framework of Swedish parental leave.

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1 Introduction

As one of the first countries with a gender-neutral paid parental leave, in which fathers were also eligible, Sweden has been considered a forerunner regarding gender equality and policies that promote an equal sharing of the care of the children.

Already in the beginning of the 1970s, Swedish parental leave legislation gave equal rights to paid leave for all mothers and fathers. However, it was not until the first reserved month, the so-called daddy month, was introduced in 1995 that fathers' uptake of paid parental leave increased dramatically. Since then, two additional reserved months have been introduced – the second month in 2002, and a third month in 2016. The reserved months apply to both parents and are based on a “use it or lose it” principle, hence the months are forfeited if not used by the designated parent.¹ This has contributed to a gradual increase in fathers' uptake of leave days, and today the average uptake is 73 days of paid parental leave among fathers, to children born in 2020, who use paid parental leave during the child's first two years.²

There are several studies of parents in Sweden that focus on either parents' equal sharing of parental leave or fathers who use many days of parental leave.³ Fathers' uptake of leave has also been the focus of studies on parents in other countries. As father's uptake of parental leave is still quite unusual in many countries, it is still a novel behaviour worth focusing on.⁴

When Swedish parental leave was introduced in 1974, it represented a shift from maternity leave to a benefit that can be used by both mothers and fathers.⁵ The purpose was to enable both parents to combine work and family life.⁶ But in parallel with the uptake of paid parental leave becoming more equal among many parents, there is a non-negligible group of fathers who still do not use it at all, or to a relatively minor extent.⁷ At the same time, almost every mother uses parental leave days.⁸

From a Swedish perspective, where it can be argued that fathers on parental leave has become the norm, it is relevant to ask which fathers do not make use of their right to paid parental leave or all of their reserved part, which cannot be transferred to the mother. In the current Swedish

¹ Duvander and Johansson, 2012;22(3):319–330.

² Swedish Social Insurance Agency's database. Retrieved Mars 17, 2023.

³ See Duvander and Viklund, 2020; Swedish Social Insurance Agency, 2020; SOU 2017:101; Swedish Social Insurance Agency, 2013:8; Swedish Social Insurance Agency, 2013:9.

⁴ See Pettigrew and Duncan, 2021; Petts et al., 2020; Kvande and Brandth, 2019; Zhelyazkova and Ritschard, 2018; Karu and Tremblay, 2018; Geisler and Kreyenfeld, 2011.

⁵ Cedstrand, 2011, p. 11–13.

⁶ SFS 2010:110, chapter 10; SOU 2017:101; Cedstrand, 2011.

⁷ Ma et al., 2020.

⁸ See Duvander and Viklund, 2020.

context less than 30 days of paid parental leave can be considered as few days and a very low uptake.

1.1 Objective and research questions

There is very little updated knowledge about which fathers do not use any, or use less than a month of, paid parental leave and how large this group is. In the light of this gap of knowledge, the purpose of this study is to provide an extensive picture of the fathers who do not use any days or only a few. In this report a few days refers to 1–29 days, i.e. less than a month.

Swedish parental leave is regulated by two different pieces of legislation. One regulates the right to take time off from work, and another that regulates the entitlement for paid parental leave.⁹ As the right to take time off work is more generous in time than the days with paid leave, parents can combine paid and unpaid parental leave during the whole preschool period.

In this report we focus on fathers' use of paid parental leave, the so-called parental benefit, but throughout the report we refer to this as parental leave, or alternatively, paid parental leave. Furthermore, we study fathers' use of parental leave during the child's first 24 months. It is during this time parents' use most of their leave days. We have studied fathers of children born in the years 1994–2017, and it is during this time that the first, second and third reserved months were introduced. We seek to answer the following questions:

- How has the share of fathers who do not use any or 1–29 days of parental leave changed over time?
- Which fathers use none or 1–29 days of parental leave?
- Over time has it become more, or less, common among fathers in different socio-economic groups to use none or 1–29 days of parental leave?

1.2 Swedish parental leave: A background

The current parental leave in Sweden replaced the earlier maternity leave in 1974. The motive of the new gender-neutral parental leave legislation, which enables fathers to take up their role as carers, was to make it possible for both parents to combine work and family. Although the focus at the time was to enable women to continue labour market work after becoming mothers, fathers were encouraged to take care of their children.¹⁰

Originally, the paid leave was six months, which could be shared between the parents as they preferred.¹¹ Over the following years, the parental leave was extended in several steps, and fathers have started to use more of it. In 1989, parental leave comprised a total of 15 months (450 days) –

⁹ The Parental Leave Act (Föräldraledighetslagen 1995:584); The Social Insurance Code (Socialförsäkringsbalken 2010:110).

¹⁰ Ferrarini, 2006, p. 32.

¹¹ Cedstrand, 2011, p. 90.

360 days were income-related and 90 days were at a lower flat-rate level.¹² At that time, fathers used about 7 percent of the days.¹³ In 2002, the total increased to 16 months (480 days) – 390 days were income-related and 90 days were at a low flat-rate (*lägstnivå*) – which still applies today.¹⁴

There is also some flexibility. First, the length of leave is counted in calendar days (rather than weeks or months) to enhance flexibility of use. For instance, it is possible to use paid parental leave up to seven days a week. Parents can also use paid leave full-time, part-time, three quarters a day, half a day, a quarter a day or even one eighth a day. The leave is extended accordingly, that is, two days of part-time leave is counted as one day of full-time leave.¹⁵ Paid and unpaid leave can be combined to enable parents to stay at home longer, which parents often use.¹⁶ However, parents cannot work while using paid or unpaid parental leave.¹⁷

Swedish parental leave also includes reserved months for each parent, an earnings ceiling, and a basic level (*grundnivå*) for parents with no or very low income. During the period of investigation, the years 1994–2017, there have been several changes made that can affect how parents choose to use their leave.¹⁸ For instance, the introduction of reserved months for each parent, changes regarding replacement level and the earnings ceiling, and increases of the basic level for parents without any earnings. In the following sections we discuss some of these changes.

Introduction of reserved months

The change that has been most efficient in prompting fathers to use parental leave days is the reserved months based on a “use it or lose it” principle. The first reserved month was introduced in 1995, where one month had to be used by the father (and one by the mother), otherwise it would be forfeited. Even though the first reserved month was introduced in the middle of an economic recession, it drastically changed both the share of fathers using parental leave and the number of days they used.¹⁹

In 2002, a second reserved month was introduced, based on the same “use it or lose it” principle. At the same time, the total parental leave was extended by one month. By then, fathers used about 16 percent of the combined parents’ leave.²⁰ The second reserved month mainly affected groups of fathers who already used the first month. However, at that time, there was already a large group of fathers who used more than one month, namely fathers with a higher education and a relatively high income. The introduction of the second reserved month did not, to any major extent, affect fathers who did not previously use parental leave.²¹

¹² Cedstrand, 2011, pp. 321–323.

¹³ Swedish Social Insurance Agency, 2012:9.

¹⁴ Cedstrand, 2011, pp. 321–323.

¹⁵ Duvander and Löfgren, 2022.

¹⁶ Swedish Social Insurance Inspectorate, 2013:13.

¹⁷ Duvander and Löfgren, 2022.

¹⁸ For a full overview of changes over time, see Duvander and Löfgren, 2022; Swedish Social Insurance Agency, *Förändringar inom socialförsäkrings- och bidragsområdena 1968-01-01–2022-09-30*; Swedish Social Insurance Agency, 2014; Cedstrand, 2011.

¹⁹ Duvander and Johansson, 2012.

²⁰ Swedish Social Insurance Inspectorate, 2018:13.

²¹ Duvander and Johansson, 2012.

In 2016, a third reserved month was introduced. It mainly affected the uptake among fathers who already used two months, but not fathers who previously did not use any days.²² From this point forward, each parent has been entitled to 115 days that can be transferred to the other parent, in addition to 90 days non-transferable days. Furthermore, each parent is entitled to 45 transferable days at a flat rate (*lägstnivå*) (Table 1).

Many countries have introduced policies similar to those of Sweden and the other Nordic countries regarding non-transferable months of parental leave.²³ In fact, the new EU directive from 2019 stipulates that at least two months of parental leave should be available to each parent. The directive was enforced in August 2022 and many European countries are now reforming their parental leave regulations.²⁴

Table 1. Number of days with paid parental leave as of the 2016 regulations

	<i>Parent 1</i>	<i>Parent 2</i>
Income-related days (transferable)	105	105
Income-related reserved days (non-transferable)	90	90
Flat-rate days (<i>lägstnivå</i>) approx. €17/day (transferable)	45	45
Total	240	240

Source: The Social Insurance Code (Socialförsäkringsbalken 2010:110).

Changes in the replacement level and earnings ceiling

In addition to the length of parental leave, the replacement level and earnings ceiling have also been shown to be important for fathers using leave.²⁵ From the start, the replacement level was set at 90 percent of the parent's earnings, although with a ceiling.

The replacement level was reduced in several steps during the economic recession of the 1990s. It was first reduced from 90 to 75 percent of total earnings, but at the end of the decade it was at 80 percent. However, in 2006, the benefit level was decreased further to 77.6 percent.

Swedish paid parental leave also has a ceiling that has varied over time. The ceiling is based on the price base amount adjusted annually to the rate of inflation. During the 1990s, the ceiling was set at 7.5 price base amount, which did not increase at the same pace as wage increases. This led to a rising number of parents, in particular fathers, who hit the ceiling and received less than 80 percent of their earnings.²⁶ In 2006, and the years that followed, the ceiling was set at 10 price base amount. The rationale behind the raised ceiling was to remove economic obstacles, particularly for fathers, to using parental leave.²⁷ However, in 2017, 29 percent of fathers

²² Swedish Social Insurance Agency, 2019:2.

²³ See Koslowski et al. (eds.), 2022.

²⁴ Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and carers and repealing Council Directive 2010/18/EU, EUT L 188/79.

²⁵ Karu and Tremblay, 2018;21(3): 344–362; O'Brien, 2009.

²⁶ Swedish Social Insurance Agency, 2020:2.

²⁷ Proposition 2005/06:142.

and 16 percent of mothers hit the earnings ceiling, which was SEK341,184 [€31,028] per year.²⁸

It is likely that fathers' incentives to take parental leave are more affected by the earnings ceiling than mothers, as fathers often have higher incomes than mothers. However, mothers are likely to be more affected by the benefit level as it is much more common for mothers to take a relatively long parental leave.²⁹

Changes in the basic level

Just as there is a ceiling, there is also a basic level or floor. If the parent has not had an income above the basic level for at least 240 consecutive days before the child's birth, the parent is entitled to parental leave at a basic level. The basic level has changed over time. During the 1990s, the basic level was SEK60 [€5] per day. During the period 2002–2016, the basic level was raised in several steps. The most recent was in 2016, when the level was raised to SEK250 [€23] per day.³⁰ The basic level (*grundnivå*) is not the same as the 45 days at a flat rate (*lägstnivå*). The latter consists of additional days at a very low level, approximately €17 per day.

An important detail is that until recently the reserved months have not been applicable for parents using leave at the basic level. This means that for couples with no or very low earnings, one of the parents, most likely the mother, has been able to use the full 16 months of paid leave. This means that the father had no economic incentive to use the parental leave as the mother could use all of it. However, since Sweden implemented the EU directive on work-life balance in August 2022, the reserved months for each parent also apply for parental leave at the basic level.³¹

Some additional reforms

There have been several other reforms to Swedish parental leave over the years, such as a maximum of 30 double days (i.e., where both parents can use parental leave the same day for the same child), age restrictions regarding the number of paid leave days that can be used after the child turns four years, and a gender equality bonus.³² However, the equality bonus was abolished in 2017 as it, until that point, had no measurable impact on parents' division of parental leave.³³

Parental leave has often been prominent on the political agenda in Sweden, as it is regarded as an instrument for gender equality both in homes and on the labour market.³⁴

²⁸ Swedish Social Insurance Agency, 2020:2; Duvander and Haas, 2018.

²⁹ Evertsson et al., 2018.

³⁰ Swedish Social Insurance Inspectorate, 2016:1; Swedish Social Insurance Inspectorate, 2019:6. Conversion of currency, November 25, 2022, Central bank of Sweden.

³¹ Chapter 12, 17§ Social Insurance Code (2010:110).

³² See Swedish Social Insurance Inspectorate, 2021:12.

³³ Proposition 2015/16:1; Ds 2015:55; Duvander and Johansson, 2012.

³⁴ See SOU 2017:101; Klinth, 2002.

1.2.1 Compensation from employers

Over time, national paid parental leave has increasingly been complemented with payments from the employer, as determined by collective agreements. State sector agreements were already in place in the 1990s, while the private sector and the municipal sector lagged behind. The private sector agreements were mainly extended during the 2000s, and a supplement for workers throughout the private sector was not in place until 2014.³⁵ Municipal sector agreements were also developed during this time. Although this supplement has varied over time between different areas of collective agreements, the state sector agreement has been more generous than other areas.

As the collective agreements normally cover earnings over the ceiling, and an additional 10 percent under the ceiling,³⁶ the ceiling and the actual national replacement level are becoming less important as obstacles to fathers' leave over time. However, at the other end, fathers who have no or low earnings will only receive a basic level of paid parental leave. This level of paid parental leave likely constrains the flexibility in the use of parental leave for the group of parents without earnings.

1.3 Previous studies on fathers' uptake

There are several studies focussing on understanding equal sharing of the parental leave or fathers who use many parental leave days in the Swedish context.³⁷ However, only a few studies have looked more closely at fathers who do not use any, or only use a few, days of parental leave. These few studies illuminate that there are clear differences between different socioeconomic groups of fathers.³⁸ For example, a study of fathers' parental leave uptake between 1993–2010 shows that older fathers, fathers with low incomes, fathers with a low education and foreign-born fathers tend not to use any parental leave.³⁹ Further studies of fathers in Denmark, Finland, and Norway – countries with leave policies similar to Sweden's – show similar results.⁴⁰ It has also been indicated that the share of non-using fathers is substantial in the other Nordic countries.⁴¹

An additional study of fathers in Sweden regarding uptake of parental leave for children born in 2009 shows that the group of fathers who use no or few days of parental leave is a relatively heterogenous group, but that fathers with a low education, and fathers with a low or very high income, are overrepresented among fathers who use few days.⁴²

³⁵ Afa Insurance, 2020; Afa Insurance, *Försäkring vid föräldraledighet*, website: www.afaforsakring.se.

³⁶ Duvander et al., 2022; Swedish Social Insurance Inspectorate, 2018:14.

³⁷ See Duvander and Viklund, 2020; Swedish Social Insurance Agency, 2020; SOU 2017:101; Swedish Social Insurance Agency, 2013:8; Swedish Social Insurance Agency, 2013:9; Duvander and Johansson, 2012.

³⁸ See Ma et al., 2020; Duvander and Viklund, 2020; Swedish Social Insurance Inspectorate, 2018:13; Duvander and Johansson, 2012.

³⁹ Ma et al., 2020.

⁴⁰ Danmarks Statistik, 2017, Saarikallio-Torp and Miettinen, 2021; Kitterød et al., 2017:2.

⁴¹ Bloksgaard and Rostgaard, 2019; Eydal and Gíslason, 2019; Kitterød et al., 2017:2; Saarikallio-Torp and Miettinen, 2021.

⁴² Duvander and Viklund, 2020.

Other studies have shown that an unequal use of parental leave is negatively associated with mothers' earnings and career development.⁴³ An unequal sharing of parental leave also affects women's financial independence, total lifetime income, and future pension. The extent to which parental leave has similar long-term consequences for fathers is unclear. However, some studies have shown that parental leave has short-term negative effects on men's earnings.⁴⁴ But when fathers use more parental leave, they also often have more frequent early contact with their children. This, in turn, seems to impact father-child contact throughout childhood.⁴⁵ Earlier studies have also shown that a father's early involvement in his child's life can have positive consequences for the child, socially, behaviourally, and psychologically.⁴⁶

⁴³ See Duvander et al., 2015:5; Swedish Social Insurance Agency, 2013:8; Swedish Social Insurance Agency, 2013:9; Budig et al., 2012; Karimi et al., 2012:22; Aisenbrey et al., 2009; Gupta et al., 2008; Oláh and Bernhardt, 2008.

⁴⁴ See Bergsvik et al., 2020; Nylin et al., 2021; Evertsson, 2016; Duvander et al., 2015:5.

⁴⁵ Duvander and Jans, 2009.

⁴⁶ Sarkadi et al., 2008.

2 Data and methods

In this study, we examine fathers' use of paid parental leave for children born during the years 1994–2017. We observe father's use of leave during the child's first 24 months, that is, for the period 1994 to 2019. It is during the first 24 months most parental leave days are used.⁴⁷ Also, the leave taken during this period often consists of longer continuous periods, rather than short periods of single days. It is moreover less often combined with work and more noticeable to employers than leave taken after the child's second birthday. This applies to both mothers' and fathers' leave periods. Of note, after the first 24 month most children have started preschool.

2.1 Data

The empirical analysis is based on register data from the Swedish Social Insurance Agency. The data consist of individual-level and longitudinal information concerning the entire Swedish population. The data contain detailed information on paid parental leave and the socio-economic and demographic characteristics of the individual parents.

Data on individual use of paid parental leave contain gross days taken at specific dates and to what extent a day was taken (full day or part of a day). We have recalculated the gross days into net days, meaning that two half gross days equals one net day.

In our analysis, we include a total of 2.32 million children who were born in Sweden during the years 1994–2017 and did not decease during the first 24 months. Multiple births, adopted children, and children to same-sex parents are excluded from the sample. The reason for this is that the rules for using parental leave is different for these groups. We have also excluded children where one or both parents died during the child's first two years; children where neither of the parents are the child's legal guardian; and children who emigrated during the first 24 months. Also, children where the father is neither a legal guardian nor has lived with the child during the child's first two years are excluded. These fathers are not entitled to paid parental leave if the mother does not transfer the days to him. Altogether, we excluded 3 percent of children from our analysis. Of note, a father may reoccur more than once in the sample if he had more than one child during the period of observation. To take that into account, we include a variable of the child's birth order.

The composition of fathers has changed during the years 1994–2017 (see Appendix, Table A 3). For instance, the proportion of fathers with primary education was higher in the beginning of the 1990s than in the 2000s, and the proportion with tertiary education has increased during the years 1994–

⁴⁷ Duvander and Andersson, 2006.

2017. The proportion not in paid work was larger during the 1990s than during the 2000s, which is related to the economic crisis that affected large parts of the population.⁴⁸ The proportion of fathers working in the private sector has been larger during the 2000s than in the 1990s. This relates to the increased privatisation of state-owned enterprises, which began in the late 1980s and gained momentum in the 1990s.⁴⁹ The proportion of foreign-born father has increased over time, which reflects the increased immigration to Sweden during the same period.⁵⁰

2.2 Method

The dependent variable in this study is the father's number of net paid parental leave days during the child's first 24 months, categorised into 0 days, 1–29 days, and 30 or more days.

The analysis is based on multinomial logistic regressions. In the first analysis, where we identify the characteristics associated with fathers who do not use any parental leave or use 1–29 days as opposed to using 30 or more days, we include only fathers to children born in the years 2015–2017. We also conduct an additional regression where we consider the mother's characteristics by combining both parents' characteristics. In a third analysis, we include children born in the years 1994–2017. To estimate trends over time in fathers' uptake, we compare the child's year of birth with factors related to the father's labour market status and origin. In all regressions, an uptake of 30 or more days is the baseline for comparison.

Based on the regression models, we estimate probabilities of using 0 days, 1–29 days, and 30 or more days, when all other variables in the model are set at mean. The sum of the probabilities for 0 days, 1–29 days and 30 or more days add up to 100 percent, meaning that the probabilities can be interpreted as adjusted proportions. The unadjusted probabilities are compared with the adjusted probabilities to examine the impact of the control variable.

The model includes several variables related to the father's labour market position, demographic characteristics, and additional control variables. See the Appendix for a detailed description.

⁴⁸ Lundborg, 2000:37.

⁴⁹ Jordahl, 2008.

⁵⁰ Statistics Sweden, 2021.

3 General trends in fathers' uptake

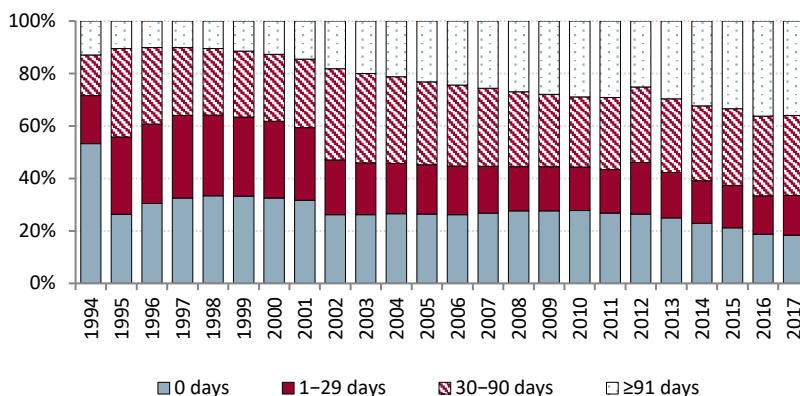
In this section, we show how fathers' use of parental leave has changed over time by examining how fathers of children born in the years 1994–2017 have used parental leave during the child's first 24 months.

During the years 1994–2017, about 2.3 million children were born in Sweden for whom paid parental leave could be used by the parents. The number of children varies between the years, from about 81,800 children in 1999 to about 104,000 children in 2017.

Our analysis shows that every third child born in 2017 had a father who used less than 30 days of parental leave, even though three months were reserved for each parent for children born in 2016 and after (Figure 1).

Even if a rather large proportion of fathers do not use any or only a few days (1–29 days), a clear decrease in these groups has occurred during the period we have studied, especially during the years when the first and the second reserved months were introduced, in 1995 and 2002. For instance, 53 percent of fathers to children born in 1994 used no parental leave at all. This can be compared with 18 percent among the fathers to children born in 2017 (Figure 1).

Figure 1. Distribution of fathers' uptake of parental leave during the child's first 24 months by the child's birth year and number of days used (in percent). Children born in 1994–2017



Note: Table A 1 (appendix) reports the distribution in absolute numbers.
 Source: Authors' calculations based on Swedish register data.

When the first reserved month was introduced in 1995, the proportion not using any parental leave was reduced by 27 percentage points. When the second reserved month was introduced in 2002, the proportion decreased by 6 percentage points, while the third reserved month, introduced in 2016, only changed this proportion by 3 percentage points (Figure 1). Thus, the largest change in the proportion that used no days took place

when the first reserved month was introduced. Since then, the decline in this proportion has been slow.

The introduction of the reserved, non-transferable, months has contributed to fathers' uptake of parental leave, but we can also see that the proportion of fathers who used no days and the proportion that used 1–29 days increased slightly for children born in the years 1996–1998. This increase coincides with the reductions of the replacement level that took place during these years, as well as the economic crisis of the 1990s.

It is worth mentioning that the proportion of mothers who did not use any parental leave for children born during the years 1994–2017 remained unchanged at around 2 percent (see Appendix, Table A 2).

Our descriptive statistics also show that the proportion of fathers who use none or 1–29 days has decreased at a much slower pace than the increase in the proportion that uses more than 90 days (Figure 1). This means that, over time, fathers have on average increased their uptake of days. Nevertheless, getting fathers to go from no days to some uptake of days has occurred more slowly than getting fathers who use parental leave to increase their uptake. Thus, the question is who are the fathers who do not use any days or very few (1–29 days)?

4 Who uses none or only a few days of parental leave?

This chapter investigates which fathers are most likely to use no or 1–29 days of parental leave. In this section, we focus on fathers of children born in the years 2015–2017 to present the most recent situation. In the analysis, various socio-economic and demographic factors are included, which previous studies have found to be associated with father's use of parental leave.⁵¹ We also include other factors that relate to the father's relation to the child. Table A 3 (Appendix) presents descriptive statistics of the variables in the model.

The results are presented in two main parts. The first part relates to the father's labour market position – income, level of education, employment status, and work sector. In an additional analysis, we take both parents' labour market positions into account. The second part focuses on demographic factors, such as the child's birth order, father's age when the child was born, father's country of origin and his age at immigration to Sweden (for foreign-born fathers), both parents' country of origin, and father's place of residence in Sweden.

In each part, we first present the unadjusted proportions of fathers' uptake of parental leave days. This is followed by the adjusted proportions where the remaining differences between groups are presented when all other variables in the model are accounted for and set at mean.

4.1 Socio-economic factors and fathers' uptake

This part focuses on the association between the father's uptake of parental leave and the father's income, education, employment status, and work sector. However, the decision to use or not use parental leave is likely to be related to both parents' income, education, employment status, and work sector. Thus, the mother's socio-economic characteristics are also relevant for the father's uptake of parental leave. It may be that parents make joint decisions on the division of leave based on household income, but one may also see the division of leave as a based-on negotiations between the parents and their individual resources.

⁵¹ See, for instance, Duvander et al., 2021; Duvander and Viklund, 2020; Ellingsæter et al., 2020; Ma et al., 2020; Swedish Social Insurance Inspectorate, 2020:4; Marynissen et al., 2019; Swedish Social Insurance Inspectorate, 2018:13; Swedish Social Insurance Agency, 2013:8; Duvander and Johansson, 2012; Duvander and Olsson, 2012:9; Geisler and Kreyenfeld, 2011; Hobson et al., 2007; Sundström and Duvander, 2002.

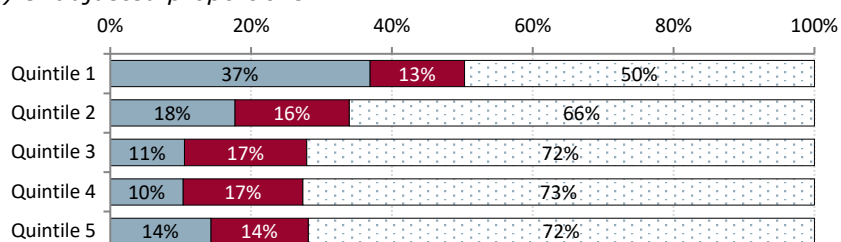
4.1.1 Father's income and uptake of leave

Fathers with the lowest income and highest income are more likely to not use any parental leave, compared to fathers with incomes in-between (Figure 2). We find no major difference between the income groups regarding an uptake of a few days (Figure 2).

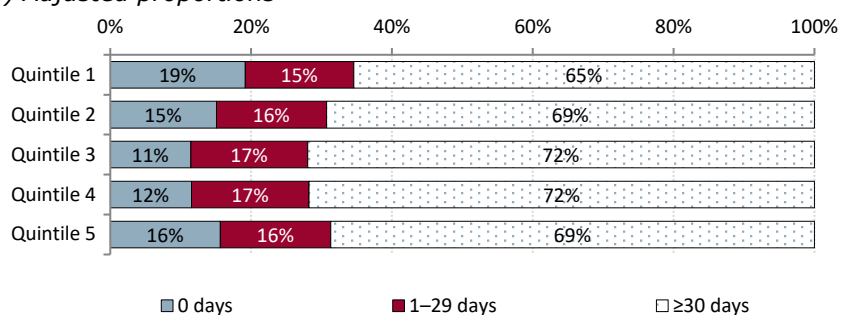
Among the fathers with a low income (quintile 1), the unadjusted proportion that does not use any days is 37 percent, compared to 11 percent among fathers with middle-income (quintile 3) (Figure 2a). The difference between these two groups is reduced but does not disappear when controlling for all other factors in the model (Figure 2b). The control variable in particular influences the estimated proportion of non-users among the fathers with the lowest income.

Figure 2. Father's income in quintiles. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017.

a) Unadjusted proportions



b) Adjusted proportions



Note: Income = the pension-based income the year prior to the child's birth. The quintiles are based on the income distribution among fathers the year prior to the child's birth. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

Among fathers with the highest income (quintile 5), the unadjusted proportion that does not use any days is 14 percent (Figure 2a), and the adjusted proportion is 16 percent (Figure 2b).

The relation between income groups and an uptake of 1–29 days of parental leave is reversed and weaker compared to the pattern seen among fathers using no days. The unadjusted proportion that uses 1–29 days is smaller among fathers with the lowest and the highest income (Figure 2a). The difference between income groups disappears when controlling for all other factors in the model (Figure 2b).

Parents' income difference and father's uptake of leave

When the father has a higher income than the mother, he is more likely not to use any days or only a few days of parental leave compared to fathers with an income more similar to the mother (Figure 3).

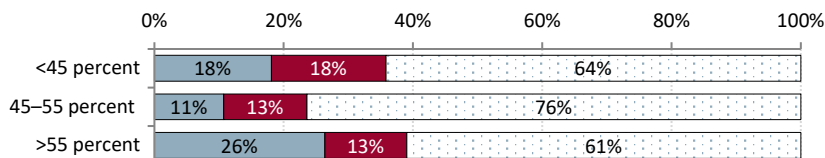
Among fathers where the mother has a lower income, the unadjusted proportion that uses no days is 18 percent, compared to 11 percent among fathers where the parents have a more similar income (Figure 3a). The difference between these groups is reduced but some difference remains when controlling for all other factors (Figure 3b).

Among fathers where the mother has a higher income, the unadjusted proportion that uses no days is 26 percent (Figure 3a). The difference between this group and the group where the parents have more similar incomes disappears when we control for all other factors (Figure 3b). This implies that there are factors besides the fact that the mother has a higher income that correlate with the father's likelihood of not using any parental leave.

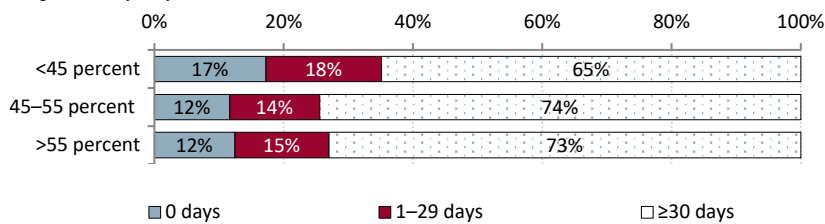
The relationship is somewhat weaker regarding the uptake of 1–29 days. Among fathers where the mother has a lower income, the unadjusted proportion that uses 1–29 days is 18 percent, compared to 13 percent among fathers where the parents have a more similar income (Figure 3a). The difference between these groups does not change much when controlling for all other factors (Figure 3b).

Figure 3. Mother's share of both parents' income. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) Unadjusted proportions



b) Adjusted proportions



Note: Income = the pension-based income the year prior to the child's birth. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

4.1.2 Father's education and uptake of leave

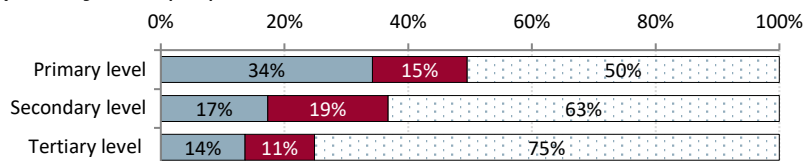
Fathers with primary education are more likely to use no days of parental leave than fathers with a higher education (Figure 4). However, fathers with secondary education are more likely to use 1–29 days of parental leave than fathers with lower and higher education.

The unadjusted proportion that uses no days is 34 percent among fathers with primary education, 17 percent among fathers with secondary education and 14 percent among fathers with tertiary education (Figure 4a). The differences between these groups are reduced but remain when controlling for all other factors in the model (Figure 4b).

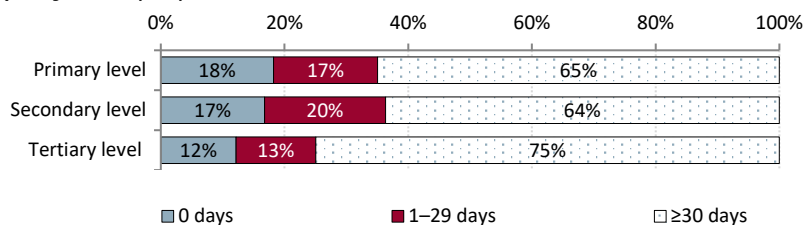
The result is different considering the use of 1–29 days. It is fathers with secondary education who are more likely to use 1–29 days (Figure 4a). This result holds even when controlling for all other factors (Figure 4b).

Figure 4. Fathers' education. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) *Unadjusted proportions*



b) *Adjusted proportions*



Note: The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

Parents' education and father's uptake of leave

The association between father's uptake and educational level become even clearer when both parents' education is considered. Fathers in parental couples where both have low (primary and secondary level) education are most likely to use no days, and those where both have high (tertiary) education are least likely to not use any leave (Figure 5).

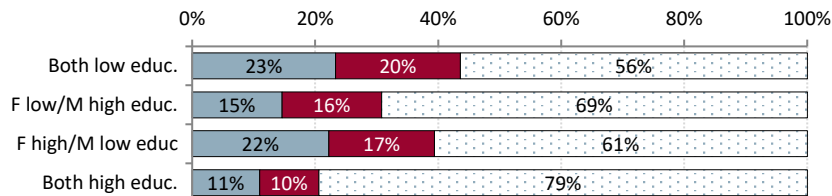
Among fathers where both parties have low education, the unadjusted proportion that uses no days is 23 percent, while the proportion is 11 percent among fathers where both parties have high education (Figure 5a). The adjusted proportion that uses no days drops to 19 percent among fathers where both parties have low education, while the proportion remains unchanged for fathers in parental couples where both have high education (Figure 5b). This means that the difference between these two groups is reduced but remains when controlling for all other factors in the model.

In cases where the parents have a very different level of education, we can see that fathers are less likely not to use any days if only the mother has a high education, but more likely not to use any days if only the father has a high education (Figure 5a). When controlling for all other factors, the difference between these groups is reduced yet remains (Figure 5b).

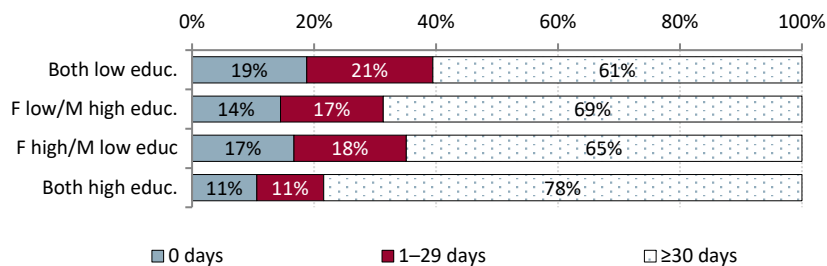
We can see a similar pattern regarding the use of 1–29 days. The unadjusted proportion is 20 percent among fathers where both parties have a low education, and 10 percent among fathers where both parties have a high education (Figure 5a). The difference between these groups is reduced but remains when controlling for all other factors (Figure 5b).

Figure 5. Parents' education. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) *Unadjusted proportions*



b) *Adjusted proportions*



Note: F=father, M=mother. Low education = secondary level or less, high education = tertiary level. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

4.1.3 Father's employment status and uptake of leave

Self-employed fathers are more likely not to use parental leave compared to employed fathers. Also, fathers who are not in paid work are more likely not to use parental leave compared to employed fathers (Figure 6).

Among self-employed fathers, the unadjusted proportion that does not use any days is 27 percent. The corresponding proportion among employed fathers is 13 percent (Figure 6a). When controlling for all other factors, the difference between these groups is reduced yet remains (Figure 6b).

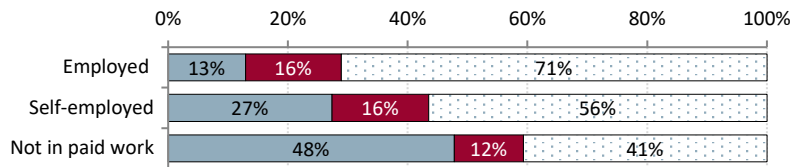
Among fathers not in paid work, the unadjusted proportion of those using no days is 48 percent (Figure 6a). When controlling for all other factors, the difference between fathers not in paid work and employed fathers becomes much smaller. The adjusted proportion drops to 19 percent among fathers not in paid work (Figure 6b). This extensive change between the unadjusted and the adjusted proportions relates to the fact that fathers with the employment status not in paid work more often have a low (or no) income, low education, are younger and foreign-born than fathers who are employed. When we take all these factors into account, the adjusted proportion for the use of no days decreases substantially.

We find no major difference between employed fathers, fathers who are self-employed or fathers not in paid work when it comes to fathers using 1–

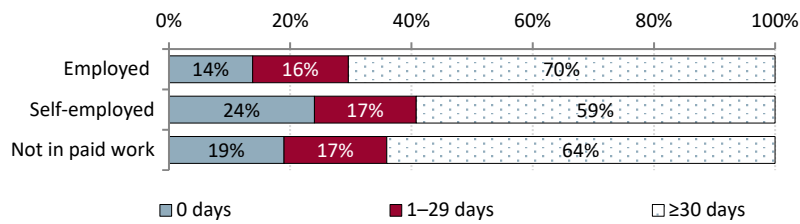
29 days of parental leave, neither the unadjusted nor the adjusted proportions (Figure 6a and Figure 6b).

Figure 6. Father's employment status. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) *Unadjusted proportions*



b) *Adjusted proportions*



Note: The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

Parents' employment status and father's uptake of leave

The association between fathers' uptake and employment status is somewhat stronger when the mother's employment is also considered (Figure 7). The unadjusted proportion that uses no days is 27 percent among fathers in parental couples where only the father is self-employed. The corresponding proportion is 10 percent among fathers where both parties are employed (Figure 7a). The difference between these groups is reduced but remains when controlling for all other factors (Figure 7b).

If only the mother is self-employed, the unadjusted difference in the proportion of fathers who do not use any days is 7 percentage points compared with the unadjusted proportion for fathers where both parties are employed (Figure 7a). This difference disappears when controlling for all other factors (Figure 7a).

We can also see that the proportion that does not use any days, among fathers where one or none are in paid work, decreases drastically when comparing the unadjusted and the adjusted proportions (Figure 7). As already mentioned, this can be linked to other factors included in the analysis, such as income, educational level, age, and parents' origin.

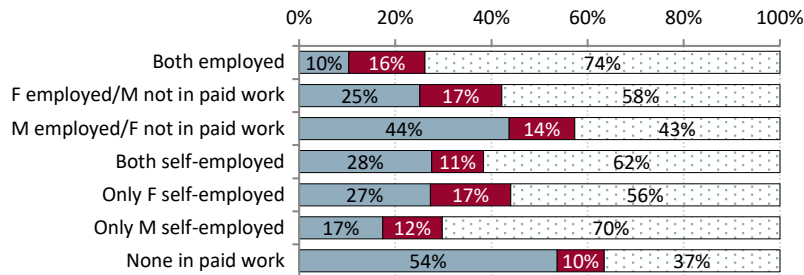
The difference between groups is much less apparent regarding the proportion of fathers using 1–29 days (Figure 7a), and there is no major difference between the unadjusted and the adjusted proportions. Nevertheless, it is more likely that a father in a parental couple where only he is self-employed will use no days compared to a father where both are employed (Figure 7b). If only the mother is self-employed, the father is

less likely to use 1–29 days than a father where both are employed (Figure 7b).

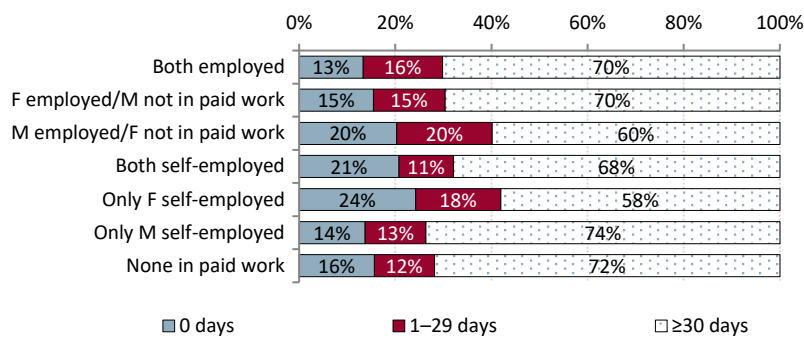
In addition, in Figure 6 it is shown that fathers not in paid work is the group least likely to use 30 or more days of parental leave. This becomes even more evident if the mother is employed (Figure 7).

Figure 7. Parents' employment status. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) Unadjusted proportions



b) Adjusted proportions



Note: F=father, M=mother. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

4.1.4 Father's work sector and uptake of leave

Fathers who work in the private sector more often do not use any days or use 1–29 days compared to fathers who work in the state sector or county sector (Figure 8).

The public sector in Sweden consists of three main sectors: the state sector (work within the central government and agencies), municipal sector (municipalities and local governments), and county sector (for instance, regional government and public health). The compensation paid by the employer that tops up the national paid parental leave varies somewhat across these work sectors (see section 1.2.1).

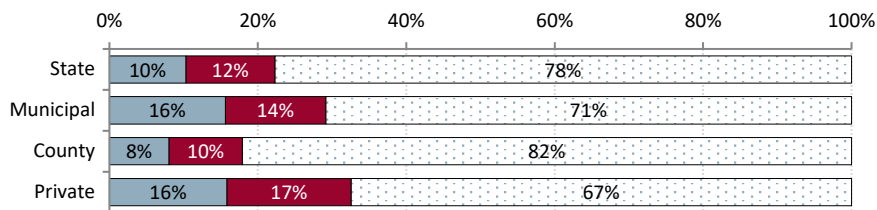
The difference in the proportion that does not use any days between fathers working in different work sectors is marginal, as is the difference in the proportion that uses 1–29 days between fathers working in different work sectors (Figure 8a). Moreover, the difference between groups is reduced when controlling for all other factors (Figure 8b). However, fathers

in the private and municipal sectors are somewhat more likely to use no days of parental leave compared to fathers in the state and county sectors (Figure 8a), but these differences diminish when controlling for all other factors (Figure 8b).

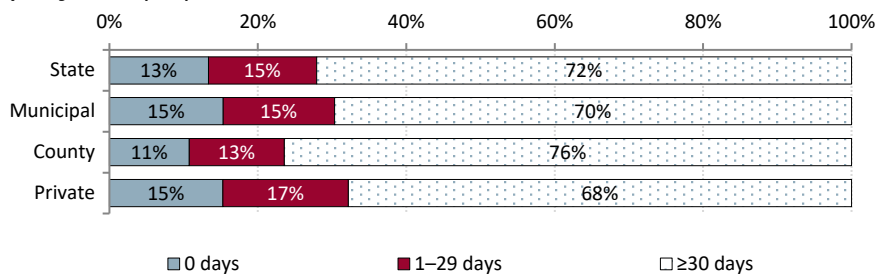
Fathers in the private sector comprise the group most likely to use 1–29 days of parental leave. The differences between groups diminish when controlling for all other factors, but fathers in the private sector are still most likely to use 1–29 days (Figure 8b).

Figure 8. Father’s work sector. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) *Unadjusted proportions*



b) *Adjusted proportions*



Note: The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors’ calculations based on Swedish register data.

Parents’ work sector and father’s uptake of leave

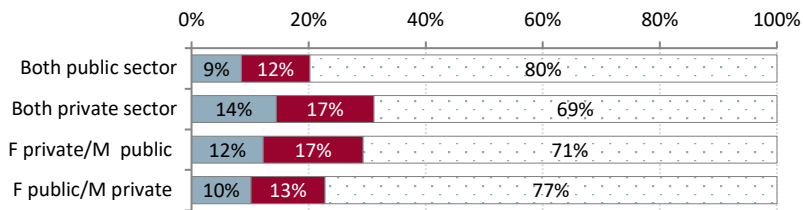
The result is similar to that discussed above when the mothers work sector is considered. In this section, the three public sectors are combined into one category.

Fathers in parental couples where both work in the private sector are more likely to use no days than fathers where both parties work in the public sector. This holds for both unadjusted and adjusted proportions that use no days of parental leave (Figure 9).

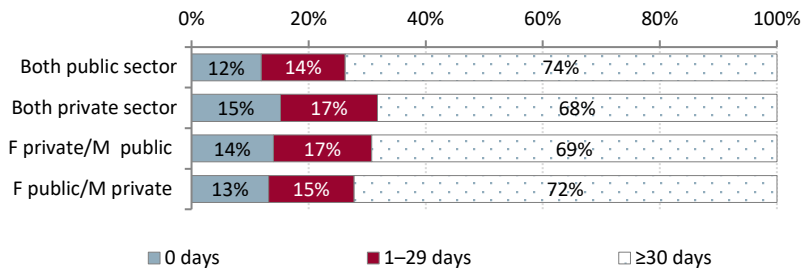
The pattern is similar considering the use of 1–29 days of parental leave. Fathers in parental couples where both or only the father work in the private sector are more likely to use 1–29 days compared to fathers where both parties work in the public sector (Figure 9a). The pattern remains when controlling for all other factors (Figure 9b).

Figure 9. Parents' work sector. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) Unadjusted proportions



b) Adjusted proportions



Note: F = father, M = mother. The parents' work sector refers to the year prior to the child's birth. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

4.2 Demographic factors and fathers' uptake

In this second section, we study the association between the father's non-use of parental leave and demographic factors, such as the child's birth order, father's age when the child was born, father's country of origin and his age when he immigrated to Sweden, both parents' country of origin, and father's place of residence. Previous studies have shown that these factors are associated with fathers' uptake of parental leave.⁵²

4.2.1 Child's birth order and father's uptake of leave

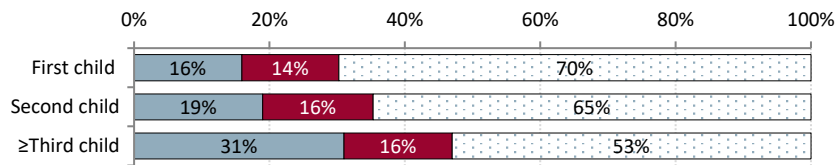
Fathers who had their second or higher order child are less likely to use any days, or more likely to use only a few days, of parental leave compared to first-time fathers (Figure 10).

The most evident difference in the proportion that does not use any days is found between first-time fathers and fathers who have had their third or higher order child. 31 percent of fathers who have had their third or higher order child use no days, and the corresponding proportion among first-time fathers is 16 percent (Figure 10a). The difference between these groups is reduced but remains on a lower level when controlling for all other factors (Figure 10b).

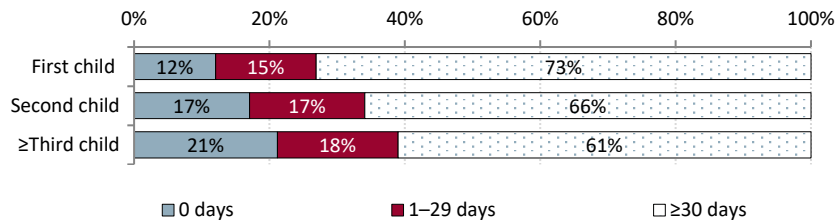
⁵² See, for instance, Duvander and Viklund, 2020; Ellingsæter et al., 2020; Ma. et al., 2020; Swedish Social Insurance Inspectorate, 2020:4; Marynissen et al., 2019; Swedish Social Insurance Agency, 2018:3; Swedish Social Insurance Inspectorate, 2013:17; Duvander and Olsson, 2012:9; SOU 2012:9; Sundström and Duvander, 2002.

Figure 10. Child's birth order. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) *Unadjusted proportions*



b) *Adjusted proportions*



Note: The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data.

We see a similar pattern regarding the proportion of fathers using 1–29 days. Fathers who had their second or higher order child are more likely to use 1–29 days than first-time fathers, but the difference between these groups is modest (Figure 10a). Yet, the difference remains when controlling for all other factors in the model (Figure 10b).

4.2.2 Father's age and uptake of leave

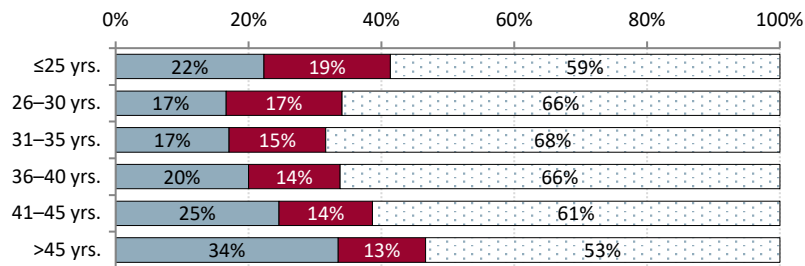
Older fathers are more likely not to use any days of parental leave than younger fathers, and younger fathers are more likely to use 1–29 days than fathers who were older when the child was born (Figure 11).

The unadjusted proportion that uses no days has a u-shaped pattern; however, the largest proportion is found among the oldest fathers. The unadjusted proportions vary from 17 to 34 percent (Figure 11a). The u-shaped pattern fades when controlling for all other factors in the model. Instead, the adjusted proportion that uses no days increases with the age of the father. Consequently, the largest adjusted difference in the proportion that uses no days is found between the youngest (14 percent) and the oldest fathers (19 percent) (Figure 11b).

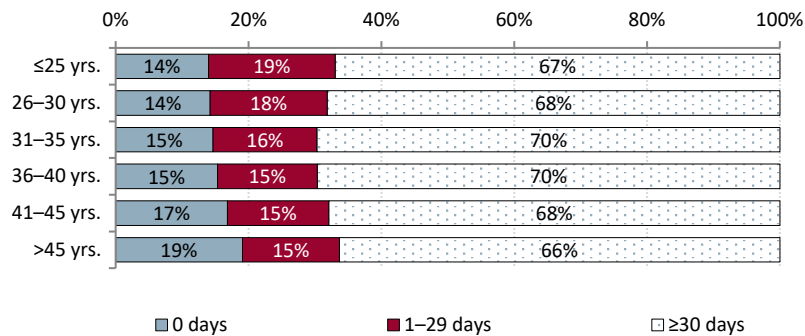
The pattern is reversed when looking at the proportion that uses 1–29 days. An uptake of a few days is somewhat more frequent among the youngest fathers (Figure 11a). This holds even when controlling for all other factors (Figure 11b).

Figure 11. Father's age at the birth of the child. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) Unadjusted proportions



b) Adjusted proportions



■ 0 days ■ 1–29 days □ ≥30 days

Note: The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data

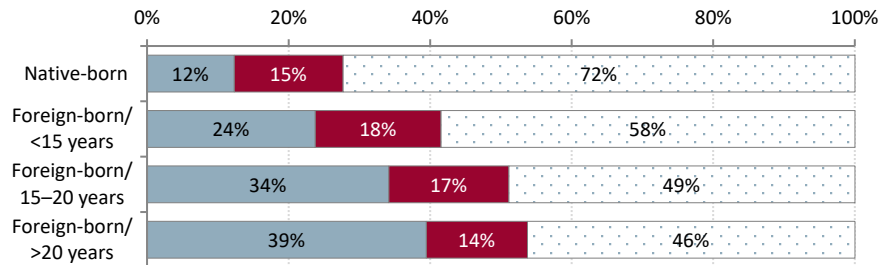
4.2.3 Father's place of birth and uptake of leave

Foreign-born fathers are more likely not to use any parental leave days compared to native-born fathers, especially if the father was older when he immigrated to Sweden (Figure 12). The likelihood of using no days increases with the father's age at immigration to Sweden. The unadjusted proportion is 39 percent among fathers who were older than 20 years at immigration and 24 percent among fathers who were younger than 15 years at immigration. The corresponding proportion among fathers born in Sweden is 12 percent (Figure 12a). The difference between groups is reduced but remains when controlling for all other factors (Figure 12b).

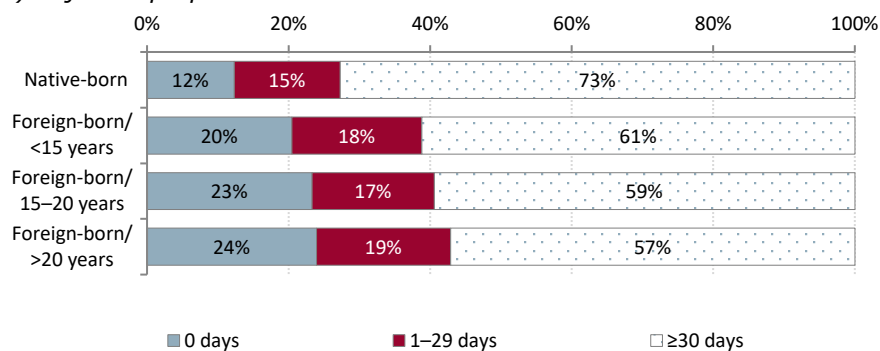
The pattern is similar but weaker regarding the proportions using 1–29 days, and this holds for both the unadjusted and the adjusted proportions using 1–29 days (Figure 12). That is, foreign-born fathers are more likely to use fewer days of parental leave than native-born fathers.

Figure 12. Father's place of birth and age at immigration to Sweden. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) Unadjusted proportions



b) Adjusted proportions



Note: The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data

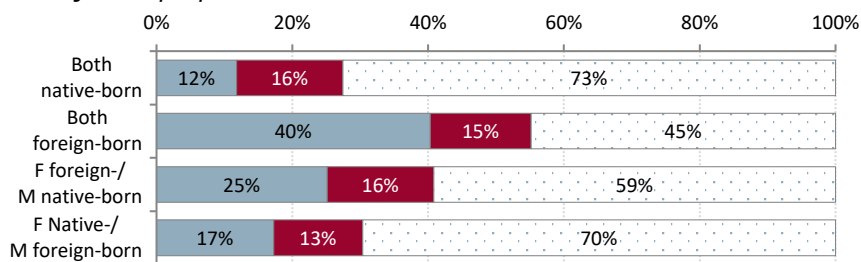
Parents' place of birth and father's uptake of leave

We find a similar result to that above when also taking the mother's country of origin into account. The unadjusted proportion that uses no days is 40 percent among fathers in parental couples where both are foreign-born, compared to 12 percent among fathers where both parties are born in Sweden (Figure 13a). This difference is reduced but remains when controlling for all other factors (Figure 13b). This indicates that a father where both parties are foreign-born is more likely not to use any days than a father in a parental couple where both are born in Sweden.

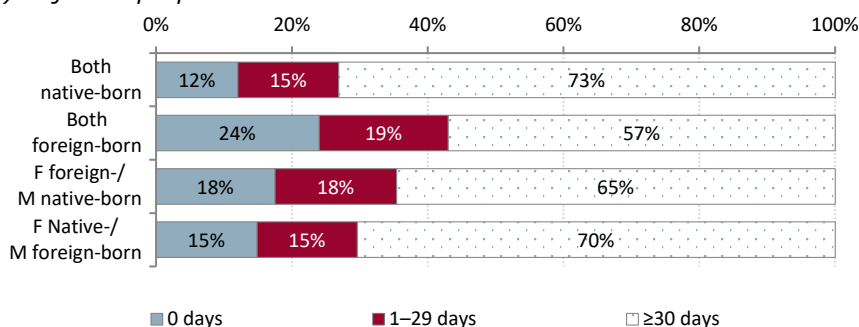
The unadjusted differences between groups are smaller regarding the proportions using 1–29 days (Figure 13a). However, when controlling for all other factors in the model, the pattern changes somewhat. The difference in adjusted proportion increases between fathers where both parties are foreign-born and among fathers where both parties are born in Sweden (Figure 13a). This indicates that it is more likely that a father in a parental couple where both are foreign-born uses 1–29 days than a father where both are born in Sweden.

Figure 13. Parents' place of birth. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) *Unadjusted proportions*



b) *Adjusted proportions*



Note: F = father, M = mother. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data

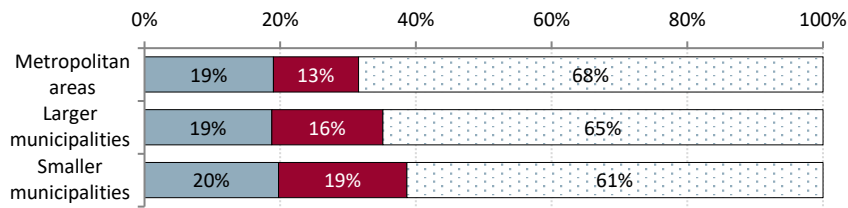
4.2.4 Father's place of residence and uptake of leave

Place of residence, namely the type of municipality in which the father lives, can be an indicator of the type of labour market that is available for him. There may also be other differences. For instance, parents' attitudes towards parental leave may differ between municipalities. However, we find only minor differences in the unadjusted proportion of fathers using no days across different places of residence (Figure 14a). When controlling for all other factors in the model, the minor difference vanishes (Figure 14b).

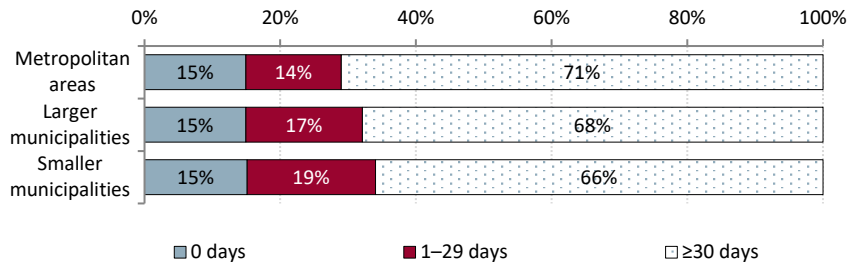
Considering the use of 1–29 days of parental leave, we find some difference between fathers with different places of residence. The unadjusted proportion that uses 1–29 days varies between 13 and 19 percent. Fathers in small municipalities are more likely to use 1–29 days than fathers living in metropolitan areas (Figure 14a), and the differences between groups does not change substantially when controlling for all other factors in the model (Figure 14b).

Figure 14. Father's place of residence. Unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born during the years 2015–2017

a) Unadjusted proportions



b) Adjusted proportions



Note: Metropolitan areas = Stockholm, Gothenburg, and Malmoe as well as nearby municipalities. Larger municipalities = cities with between 40,000 and 200,000 inhabitants and nearby municipalities. Smaller municipalities = municipalities with less than 40,000 inhabitants. The adjusted proportions are based on the regression presented in the Appendix, Table A 5. See also Table A 4.

Source: Authors' calculations based on Swedish register data

5 Has the uptake pattern changed over time among different groups of fathers?

Considering the reforms that have occurred over time, aimed at increasing fathers' uptake of parental leave, it is relevant to consider how fathers' uptake of parental leave has changed over time. In this chapter, we examine whether fathers' uptake within and between different socio-economic and demographic groups has changed, that is, if the difference between different groups of fathers has increased or decreased regarding non-use or the use of 1–29 days of parental leave. In this chapter, we focus on fathers who had a child during the years 1994–2017 and the fathers' uptake pattern over time.

5.1 Changes in uptake among different socio-economic groups

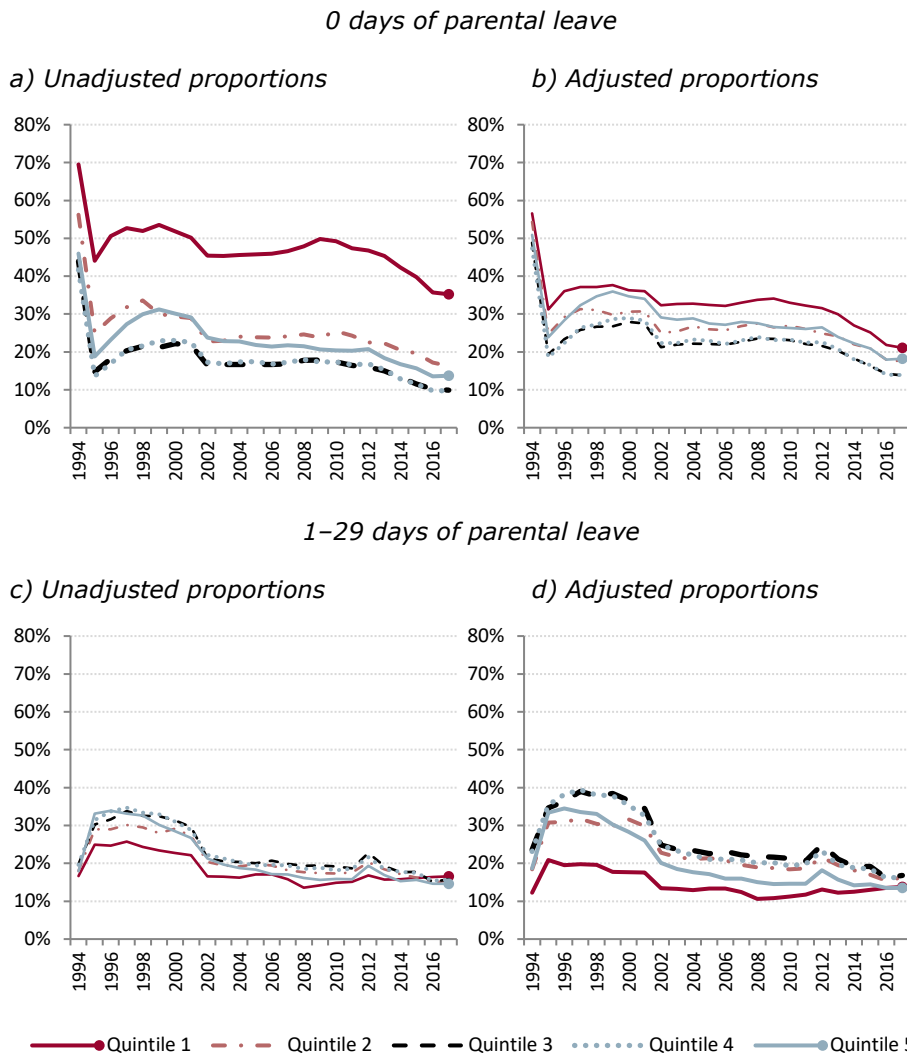
Here we analyse changes in the association between father's uptake of no or few days of parental leave and the father's income, father's employment status and father's work sector. These factors can be linked to the father's labour market situation.

5.1.1 Father's income and uptake over time

The proportion of fathers who do not use any days of parental leave has decreased over time for all income groups. However, the differences between the income groups are relatively unchanged after the introduction of the first reserved month in 1995. Throughout the whole period, fathers with a low income more often use no days of parental leave compared to fathers in the other income groups.

The unadjusted proportions for fathers using no days are substantially higher among fathers with a low income compared to those in the other income groups. This difference is clear over time (Figure 15a). Low-income fathers were the group least likely to change their uptake when the first and the second reserved months were introduced in 1995 and 2002. When the first reserved month was introduced, the proportion of non-use among fathers with a low income (quintile 1) dropped from 70 to 44 percent. However, among fathers with an income in the middle group (quintile 3) the proportion was halved – from 44 to 15 percent (Figure 15a). In parallel, we see an increase in the proportion of fathers using 1–29 days of parental leave (Figure 15c).

Figure 15. Father's income in quintiles. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born 1994–2017



Note: Income = the pension-based income the year prior to the child's birth. The quintiles are based on the income distribution among fathers the year prior to the child's birth. See Appendix Table A 6 for the results in numbers.

Source: Authors' calculations based on Swedish register data

During the second half of the 1990s, the proportion of fathers who used no days increased among all income groups. This may be a consequence of the economic recession that occurred in Sweden during the 1990s and the reduction of the income replacement levels regarding parental leave (Figure 15a).

After the introduction of the second reserved month in 2002, once again, fewer fathers used no days. However, the clear difference between low-income fathers and the other income groups remained (Figure 15a). When the second reserved month was introduced, fewer fathers used 1–29 days of parental leave (Figure 15c). Prior to 2002, it was foremost fathers in the middle group (quintiles 3 and 4) who used 1–29 days. After 2002, these groups of fathers gradually began to use 30 or more days (Table A 6). The same change did not occur for the group of fathers with the lowest income.

The result points to a parallel change, where the differences between income groups using no days remain unchanged, while the differences between the income groups using 1–29 days has decreased.

When controlling for all other factors in the model, many of the differences between income groups disappear, especially regarding fathers using 1–29 days of parental leave. However, the difference between low-income fathers and fathers who use no days remains (Figure 15b and Figure 15d). This suggests that father's income is a relevant factor regarding his uptake of parental leave days.

5.1.2 Father's education and uptake over time

Throughout the whole period, fathers with primary education use no days to a greater extent than fathers with higher education (Figure 17a), and fathers with secondary education use 1–29 days to a greater extent than fathers with tertiary education (Figure 17c). In addition, the difference between fathers with primary education and fathers with tertiary education regarding the proportion that uses no days has increased over time (Figure 17a).

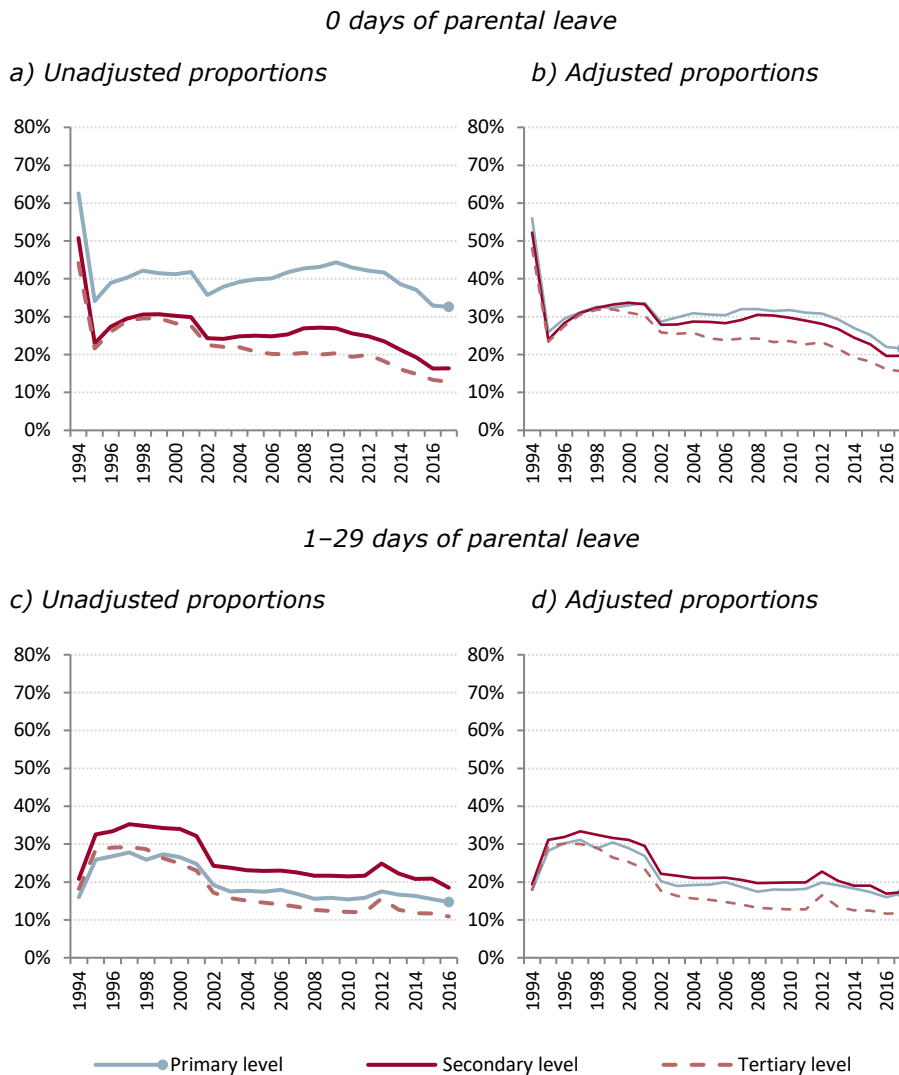
Low-educated fathers are the group who changed their uptake to the least extent when the first and the second reserved months were introduced in 1995 and 2002. The proportion not using any days among fathers with primary education dropped from 63 to 34 percent when the first reserved month was introduced in 1995. During the same year, the proportion among fathers with tertiary education was halved, from 44 to 22 percent (Figure 17a). At the same point in time, more fathers began to use 1–29 days, especially fathers with secondary education (Figure 17c), while fathers with tertiary education already in 1995 started to use 30 or more parental leave days (Table A 8).

In 2002, the proportion using no days was reduced among all groups, but during the following years, the proportion increased among fathers with primary education. It was not until 2010 that the proportion that uses no days among low-educated fathers started to drop somewhat (Figure 17a).

In parallel with the introduction of the second reserved month, the proportion of fathers using 1–29 days was reduced. However, the use of 1–29 days was more common among fathers with secondary education than among the other groups (Figure 17c).

Some of the differences between educational groups disappear when controlling for all other factors, but the difference between fathers with primary education and fathers in other educational groups remains, and the difference between these groups has in fact increased (Figure 17b and Figure 17d). The widening gap between the low-educated fathers and fathers with a high education can relate to an increase of fathers with tertiary education over time, meaning that low-educated fathers are a more select group today than in the early 1990s.

Figure 16. Fathers' education. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born 1994–2017



Note: See Appendix Table A 8 for the results in numbers.

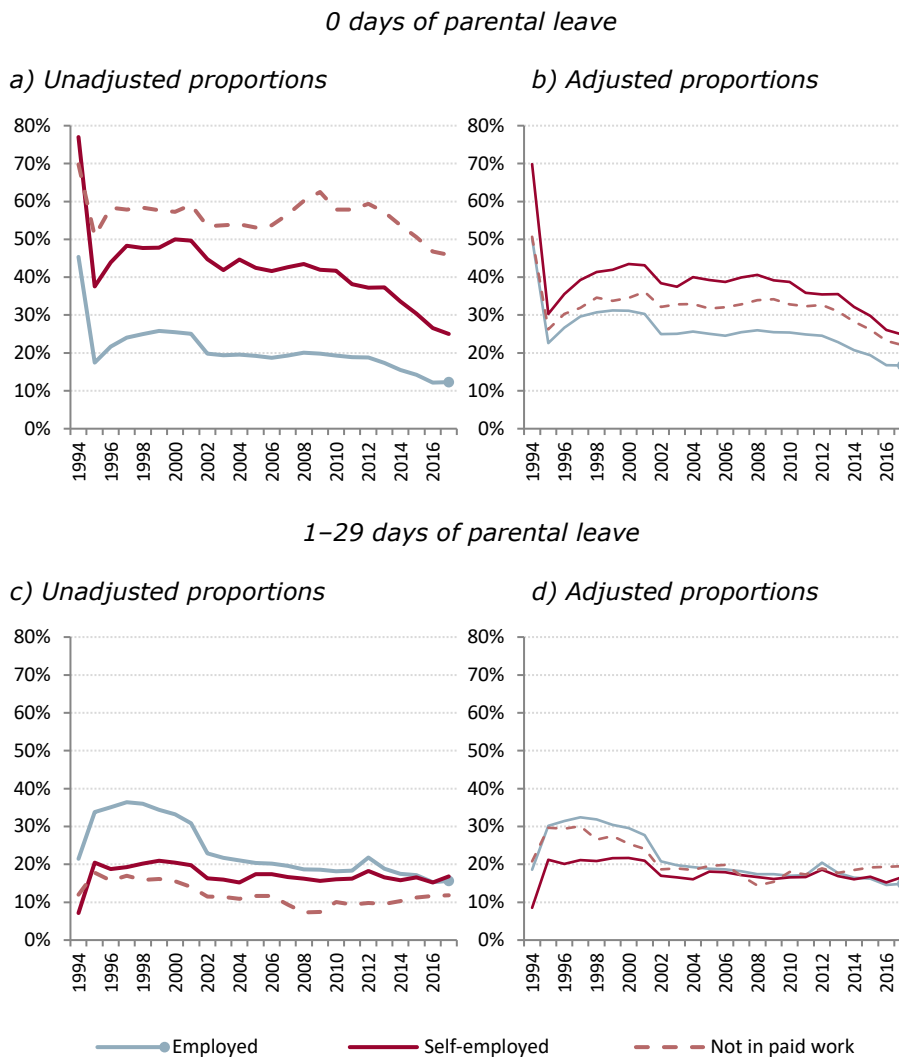
Source: Authors' calculations based on Swedish register data

5.1.3 Father's employment status and uptake over time

Throughout the whole period, we find that self-employed fathers and fathers not in paid work are more likely not to use any days than employed fathers. However, the difference between self-employed and employed fathers in the proportion that uses no days has decreased, while the difference between fathers not in paid work and employed fathers is unchanged over time (Figure 18a).

The proportion of self-employed fathers using no days was halved from 77 to 38 percent, when the first reserved month was introduced in 1995. The proportion of non-users among fathers not in paid work dropped from 70 to 51 percent, and among employed fathers the proportion of non-users was more than halved from 45 to 17 percent (Figure 18a). During the same year, the proportion of fathers using 1–29 days increased, especially among employed fathers (Figure 18c).

Figure 17. Father's employment status. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born 1994–2017



Note: See Appendix Table A 9 for the results in numbers.

Source: Authors' calculations based on Swedish register data

When the second reserved month was introduced in 2002, the proportion that used no days decreased more among employed fathers than among self-employed and fathers not in paid work (Figure 18a). For the latter group, the proportion of non-users began to increase in the following years. It is not until 2012, when the double days (both parents can use parental leave the same day) were introduced, that the proportion that used no days decreased among fathers not in paid work (Figure 18a). Among self-employed fathers, the proportion that used no days gradually decreased during the 2000s (Figure 18a).

Among both self-employed and fathers not in paid work, the proportion that uses 1–29 days is rather unchanged after 2002, compared to the proportion among employed fathers (Figure 18c).

When controlling for all other factors, the differences between groups are reduced, but some difference remains, especially regarding the proportions using no parental leave days (Figure 18b and Figure 18d). A pattern that

emerges for the whole period is that self-employed fathers is the group most likely not to use any days, compared to employed fathers and fathers not in paid work (Figure 18b). Yet, the difference in the proportion using no days between fathers not in paid work and employed fathers is extensively reduced (Figure 18b).

5.1.4 Father's work sector and uptake over time

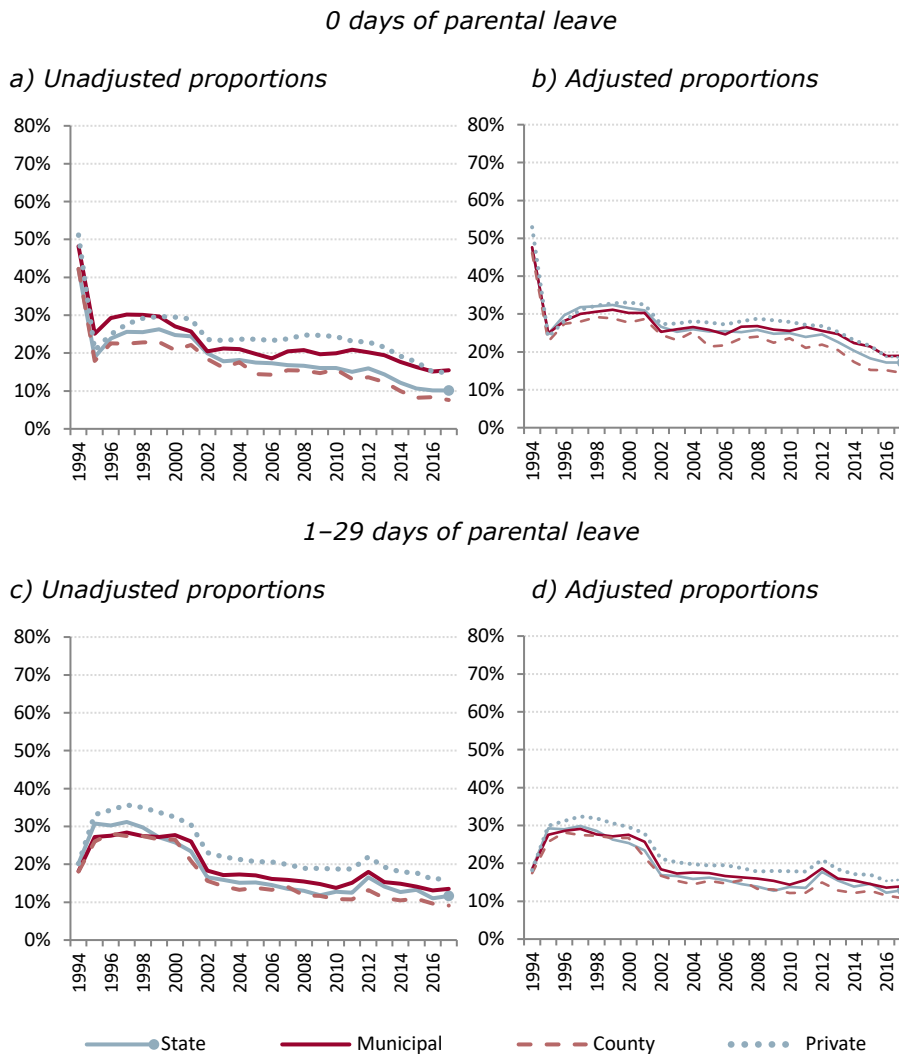
Throughout the period, it is slightly more common among fathers in the private sector not to use any days or use 1–29 days of parental leave compared to fathers working in the state or county sectors. Moreover, fathers working in the municipal sector are more likely to use no days than fathers working in the other two public sectors (state or county sector). However, the difference between fathers working in different sectors is very small and relatively unchanged over time (Figure 19a and Figure 19c).

Nevertheless, in 2006, the trends regarding the proportion of fathers not using any days diverged (Figure 19a). At that point in time, we see a widening gap in the proportion that used no days between fathers in the private sector or municipal sector compared with fathers in the state sector or county sector (Figure 19a). It was during this period that the collectively agreed supplement to parental leave was developed, but at different paces within different work sectors.⁵³ Furthermore, towards the end of the period, we see that the differences in the proportion that uses no days decreases somewhat between fathers in the private sector and fathers in the governmental or county sector (Figure 19a).

The change in the proportion that uses no or 1–29 days has occurred as parallel trends among fathers working in different sectors (Figure 19a and Figure 19c). However, it should be noted that the proportion that uses 1–29 days is rather similar over time, regardless of the fathers' work sector. When controlling for all other factors in the model, most of the differences in the proportion that uses no or 1–29 days between fathers working in different work sectors disappear (Figure 19b and Figure 19d).

⁵³ See Duvander et al., 2022; Swedish Social Insurance Inspectorate, 2018:14.

Figure 18. Father's work sector. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born 1994–2017



Note: See Appendix Table A 10 for the results in numbers.

Source: Authors' calculations based on Swedish register data

5.2 Changes in uptake among different demographic groups

In this section, we analyse changes in the association between fathers' uptake of no days or a few days and demographic factors such as the child's birth order, father's country of origin and age when immigrating to Sweden, and father's place of residence.

5.2.1 The child's birth order and fathers' uptake over time

Fathers who had their third or higher order child more often used no days of parental leave than first-time fathers. This holds for the whole period examined (Figure 20a). The difference between first-time fathers and fathers who have their third or higher order child is relatively unchanged over time, while difference between first-time fathers and fathers who had

their second child diminished over time (Figure 20a). The difference in the proportion that uses few days of parental leave is small and has decreased further over time (Figure 20c).

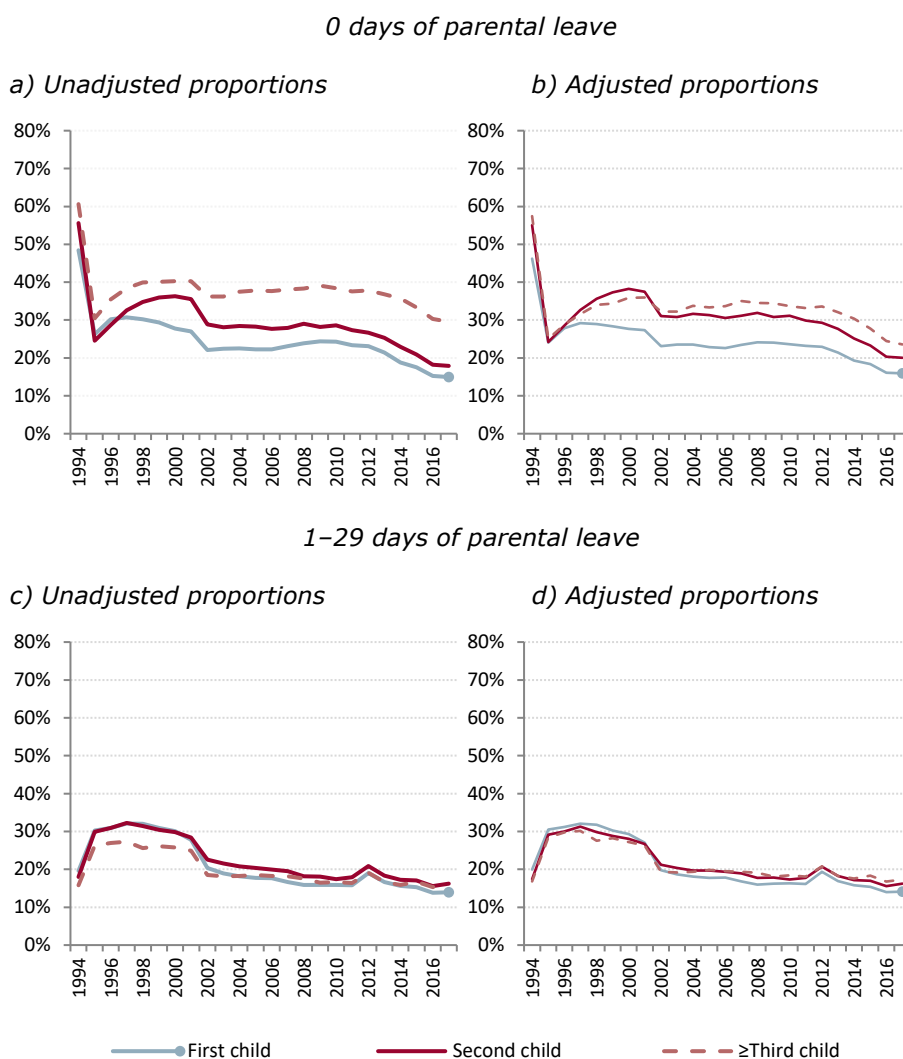
When the first reserved month was introduced, the proportion not using any days decreased to a similar level among first-time fathers and fathers who had their second child, while the proportion was slightly higher among fathers who had their third or higher order child (Figure 20a).

During the second half of the 1990s, the groups started to diverge regarding the proportion of non-users (Figure 20a). In parallel, the proportion that used 1–29 days started to increase among first-time fathers and fathers who had their second child. This increase is less evident among fathers who had their third or higher order child (Figure 20c).

The proportion of fathers who did not use any days or used 1–29 days decreased in 2002 but non-use was still more common among fathers who had their third or higher order child (Figure 20a and Figure 20c). Since the beginning of the 2000s, the difference in the proportion that uses no days is unchanged between first-time fathers and fathers who had their third or higher order child, while the difference between first-time fathers and fathers who had their second child has decreased (Figure 20a). Also, the difference between the groups of fathers using 1–29 days has decreased over time (Figure 20c).

When controlling for all other factors, part of the differences between the groups disappears, especially regarding the proportion that uses 1–29 days. However, there is still a clear difference regarding the proportion that uses no days, between first-time fathers and fathers who already have children, especially fathers who have their third or higher order child (Figure 20b and Figure 20d). This means that there is a direct link between the father's non-use of parental leave and the child's birth order that cannot be explained by the other factors controlled for in the analysis.

Figure 19. Child's birth order. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 for children born 1994–2017



Note: See Appendix Table A 11 for the results in numbers.

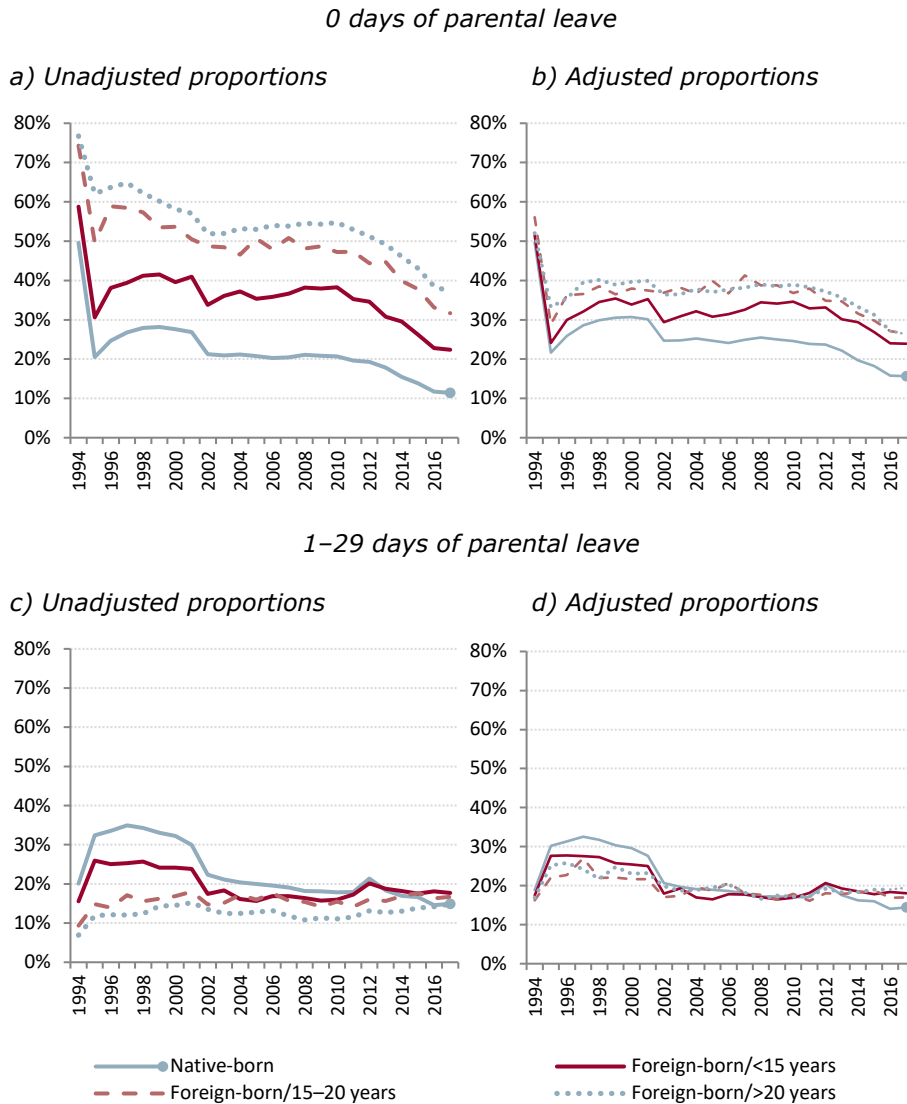
Source: Authors' calculations based on Swedish register data

5.2.2 Father's place of birth and uptake over time

Throughout the whole period, it is more frequent among foreign-born fathers not to use any parental leave compared to native-born fathers, especially if the father was older than 20 years at immigration to Sweden, and the difference between foreign-born and native-born fathers is unchanged over time (Figure 21a). However, regarding the proportion that uses 1–29 days of parental leave, the difference between foreign-born and native-born fathers has decreased over time (Figure 21c).

In 1995, when the first reserved month was introduced, the proportion of non-users decreased among all groups but the decrease was smaller among the group of foreign-born fathers who were older than 20 years at immigration to Sweden and the group that was 15–20 years at immigration (Figure 21a).

Figure 20. Father's place of birth and age at immigration to Sweden. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born 1994–2017



Note: See Appendix Table A 12 for the results in numbers.

Source: Authors' calculations based on Swedish register data

The proportion of non-using fathers and the proportion of those using 1–29 days dropped in 2002, when the second reserved month was introduced, especially among native-born fathers and foreign-born fathers who were younger than 15 years at immigration to Sweden (Figure 21a and Figure 21c).

The difference in the proportion of non-users, between native-born and foreign-born fathers, has been approximately the same during the 2000s and onwards (Figure 21a). However, regarding the proportion that uses 1–29 days of parental leave, the difference has decreased between foreign-born fathers who were younger than 15 years at immigration and fathers who were 15–20 years when immigrating to Sweden (Figure 21c).

The difference between native-born and foreign-born decreases when controlling for all other factors, especially regarding the proportion that uses 1–29 days, but a clear part of the difference between groups in the proportion of non-users remains (Figure 21b and Figure 21d). This suggests that there are differences between native-born and foreign-born fathers regarding the likelihood of not using any parental leave that cannot be explained by the other factors in our analysis, such as income, education, and employment status.

5.2.3 Father's place of residence and uptake over time

Chapter 4 showed only minor differences regarding the proportion of non-users with respect to fathers living in different types of municipalities, while the use of 1–29 days is more frequent among fathers in smaller municipalities than those in metropolitan areas. However, the difference between groups is small. We find similar results over time, where the difference in the proportion of non-users has decreased over time, while the difference in the proportion that uses 1–29 days or takes out a few days is unchanged (Figure 22a and Figure 22c).

The changes over time, in the proportion of non-users or the proportion that uses 1–29 days, have occurred in a similar way for all groups, regardless of the father's place of residence (Figure 22a and Figure 22c). We see a decrease in the proportion of non-users among all three groups when the first reserved month was introduced. The proportion that used no days was roughly the same regardless of the father's place of residence, and from 2008 and onwards there are no differences between groups regarding the proportion that uses no days of parental leave (Figure 22a).

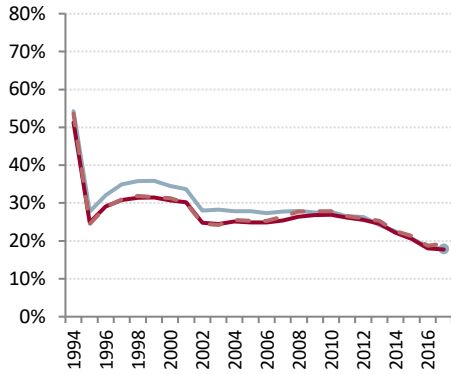
In 2002, when the second reserved month was introduced, the proportion using 1–29 days decreased in a similar way for all three groups but from different levels. Even before that year, fathers living in smaller municipalities used 1–29 days to a slightly greater extent than fathers living in metropolitan areas, and this difference remains throughout the whole period, especially from the 2000s and onwards (Figure 22c).

When controlling for all other factors in the model, the differences in the proportion of non-users between fathers living in different types of municipalities disappears (Figure 22b). This suggests that other factors, rather than the father's place of residence, determine whether a father uses parental leave or not (Figure 22b). Considering fathers using 1–29 days, the differences between fathers living in different types of municipalities remains even after controlling for all other factors in the model (Figure 22d).

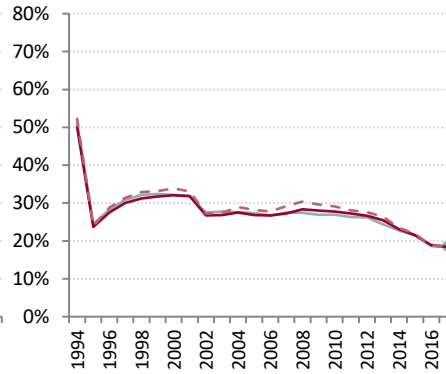
Figure 21. Father's place of residence. Changes in the unadjusted and adjusted proportion of fathers using 0 days or 1–29 days of parental leave for children born 1994–2017

0 days of parental leave

a) Unadjusted proportions

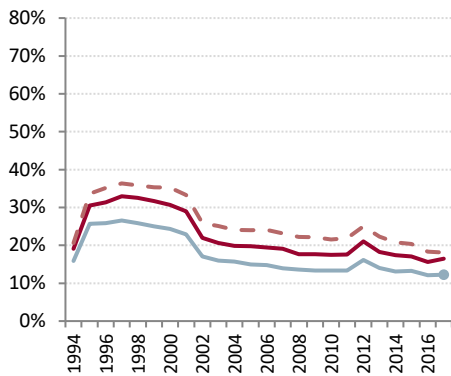


b) Adjusted proportions



1–29 days of parental leave

c) Unadjusted proportions



d) Adjusted proportions



—●— Metropolitan areas — Larger municipalities - - - Smaller municipalities

Note: Metropolitan areas = Stockholm, Gothenburg, and Malmoe as well as nearby municipalities. Larger municipalities = cities with between 40,000 and 200,000 inhabitants and nearby municipalities. Smaller municipalities = municipalities with less than 40,000 inhabitants. See Appendix Table A 13 for the results in numbers.

Source: Authors' calculations based on Swedish register data

6 Summary and discussion

We have examined which fathers do not use any paid parental leave or only a few days (1–29 days) during the child's first 24 months. We have also examined whether the pattern has changed over time for children born between 1994 and 2017. Below we summarise and discuss the results.

Our overall conclusion is that every third child born in 2017 has a father that uses fewer than 30 days of parental leave during the child's first two years, but the proportion of fathers using no or few leave days has decreased over time for children born in 1994–2017.

Just after the first reserved month was introduced in 1995, 26 percent of fathers did not use any parental leave at all, and 29 percent used 1–29 days. The decrease in no use or only a few days of leave has since then not been particularly rapid. Among fathers to children born in 2017, 18 percent did not use any parental leave at all, and 15 percent used 1–29 days.

The analysis also shows that factors related to the labour market, such as income, education, and employment, are associated with fathers' non-use of parental leave. The same applies to demographic factors, such as the child's birth order and the father's age, origin, and place of residence. We also find that the group of fathers not using any leave differs from fathers who use 1–29 days in some respects, but the general pattern is that the difference between fathers is greater regarding a non-uptake than an uptake of 1–29 days.

The labour market situation is associated with fathers' non-use of parental leave. For instance, we find that fathers with the lowest or the highest income are most likely to use no days of parental leave, just as fathers with primary education are more likely to use no days than fathers with tertiary education. These results are in line with previous studies, which have shown that fathers with the lowest and the highest income tend not to use many days of parental leave or share these days equally⁵⁴ and that fathers with primary education use fewer days than fathers with a higher education.⁵⁵

The analysis shows this bifurcation between groups of fathers is present during the whole examined period and has, regarding father's education, even increased. We therefore conclude that economic factors still interact with whether fathers make use of their entitlement to parental leave.

We note that fathers with a low income and low education often have a more precarious situation on the labour market, for instance, worse employment

⁵⁴ See Swedish Social Insurance Agency, 2013:8; Duvander and Johansson, 2012; Hobson et al., 2007; Sundström and Duvander, 2002.

⁵⁵ See Swedish Social Insurance Inspectorate, 2018:13.; Duvander et al., 2021; Geisler and Kreyenfeld, 2011.

conditions and a less stable income, which can make parental leave more difficult and riskier.⁵⁶

At the other end of the spectrum, fathers with a high income tend to hit the earnings ceiling.⁵⁷ A parent with an income below the earnings ceiling receives parental leave that corresponds to nearly 80 percent of their earnings, but a parent who hits the earnings ceiling receives even less than 80 percent of their earnings. Looking at the entire population, 29 percent of men and 16 percent of women aged 20–65 had incomes above the earnings ceiling in 2017.⁵⁸ This means that a relatively large share of parents has incomes above the earnings ceiling.

The analysis also shows a relatively small difference in fathers' probability to use no or 1–29 days between different work sectors, even though different sectors have a variety of generous top-ups. Today, the collectively agreed extra compensation paid by the employer, which supplements the national paid parental leave, is available for most employees but the lengths and levels of the compensation varies.⁵⁹ As we find only marginal differences between sectors, the earnings ceiling may have become less important, at least for shorter periods of parental leave where the extra compensation covers the income loss.

Parents with a low income have had a weaker incentive to share parental leave. Up to the autumn of 2022, the parental leave construction did not encourage shared parental leave among parents with a low income. The reason was that the reserved months did not apply if one or both parents received compensation at the basic level. Hence, the incentive for parents to share parental leave differed between those who were entitled to income-related compensation and those who were only entitled to compensation at the basic level. This also meant that low-income parents did not lose leave days if only one parent (most often the mother) used the leave. However, since the end of the observation period, the regulations for reserved months has changed. The reserved month now applies to all parents, even when one or both parents have parental leave at the basic level.

The analysis shows that the father's income as well as the relationship between the parents' incomes are relevant to whether the father uses parental leave. The analysis also shows that it is more likely that fathers use no days if the mother's income is lower than the father's compared with parents who have more equal incomes. This result is in line with previous studies, which have shown that an unequal distribution of income within a household may inhibit fathers' use of parental leave.⁶⁰ Previous studies have moreover shown that financial reasons are a recurring motive when parents themselves explain their division of parental leave.⁶¹

⁵⁶ Duvander et al., 2021.

⁵⁷ Duvander et al. 2022.

⁵⁸ Swedish Social Insurance Agency, 2020:2.

⁵⁹ See Duvander et al., 2022; Swedish Social Insurance Inspectorate, 2018:14; Afa Insurance, 2020; Afa Insurance, *Försäkring vid föräldradighet*, website: www.afaforsakring.se.

⁶⁰ Swedish Social Insurance Inspectorate, 2020:4; Swedish Social Insurance Inspectorate, 2018:13; Alsarve and Boye, 2012; Sundström and Duvander, 2002.

⁶¹ Evertsson et al., 2018; Alsarve and Boye, 2012; National Social Insurance Board, 2003.

The analysis shows that parental leave is less used by self-employed fathers, that is, self-employed fathers are more likely not to use any paid leave compared to employed fathers. The difference between self-employed and employed fathers has decreased over time but remains. Our result is in line with previous studies of fathers in Sweden, which show that those self-employed tend to use fewer days of parental leave compared to those employed.⁶²

Previous studies regarding the Swedish social security system have stressed that parental leave is not adapted to the self-employed, not least because of difficulties determining the level of compensation, which results in rather unpredictable compensation.⁶³ Our analysis suggests that the problems identified by these other studies remain, and that parental leave still is less accessible to self-employed fathers. However, it is relevant to point out that it is less likely that fathers in couples where only the mother is self-employed use no days compared to couples where only the father is self-employed. Nevertheless, it is relevant to further examine the availability of social security and possible difficulties self-employed parents may meet regarding parental leave, as to eliminate potential obstacles for self-employed parents to use parental leave.

The analysis also shows that father's origin and the child's birth order are related to the father's uptake of parental leave. We found that it is more common for foreign-born fathers not to use any days or to use 1-29 days compared to native-born fathers. This pattern becomes clearer the older the father was at immigration to Sweden. Our analysis also shows that the difference in non-use between native-born and foreign-born fathers is relatively unchanged over time. However, the difference in the proportion that uses 1–29 days between native-born and foreign-born fathers has decreased over time.

These results are in line with previous studies that have shown that foreign-born fathers use parental leave to a lesser extent than native-born fathers.⁶⁴ Previous studies have also explained the non-use or use of relatively few days of parental leave among foreign-born fathers by suggesting it is more common among foreign-born than native-born to have a weaker labour market attachment, and those foreign born more often have precarious jobs.⁶⁵ These factors may lead to difficulties among foreign-born fathers in using parental leave.

Other potential explanations could be that foreign-born fathers may not know about their entitlements regarding parental leave to the same extent as native-born fathers. This can in turn affect the foreign-born fathers' opportunities, capabilities, and perhaps also their willingness to use parental leave. A previous report from the Swedish Social Insurance Inspectorate shows that native-born parents have more knowledge about the rules concerning parental leave than foreign-born parents.⁶⁶ Therefore,

⁶² Swedish National Audit Office, 2018:1; SOU 2017:101; Företagarna, 2015; Swedish Social Insurance Inspectorate, 2012:18.

⁶³ See Swedish National Audit Office, 2018:1; SOU 2017:101; Företagarna, 2015.

⁶⁴ Ellingsæter et al., 2020; Marynissen et al., 2019; Swedish Social Insurance Inspectorate, 2018:13; Swedish Social Insurance Inspectorate, 2013:17; Duvander and Olsson, 2012:9; SOU 2012:9.

⁶⁵ Ellingsæter et al., 2020; SOU 2012:9.

⁶⁶ Swedish Social Insurance Inspectorate, 2020:3.

it may be relevant to further examine the reasons why foreign-born fathers do not use parental leave to the same extent as native-born fathers.

The analysis also shows that the more children a father has, the more likely he is not to use any days of parental leave for the latest born child. Furthermore, the differences in the proportion that uses no days, between first-time fathers and fathers who had their third or higher order child, is unchanged over time. However, the difference between first-time fathers and fathers who had their second child has decreased over time.

Why fathers of a higher order child do not use parental leave is rather unknown. Possible explanations may be that the financial burden increases with several children, and that families with several children therefore have greater economic limitations regarding how they divide the days of parental leave. It is also possible that the parents have made previous choices that make it more difficult to share the care responsibility more equally for the later children. It can also be related to choices concerning the working situation of either parent, where they consider it to be more difficult for the father to use parental leave later in his career, or it may be that the parents' priorities have changed between children.

6.1 Concluding remarks

Sweden is known, internationally, for succeeding well in getting parents to share parental leave. The question of shared responsibility for care is highly relevant due to the EU directive on work-life balance, which was enforced as law in all the EU countries on August 2, 2022.⁶⁷ The Directive stipulates, among other things, that each worker has an individual right to four months of parental leave, out of which two months should be paid and non-transferable.⁶⁸ Such rights have long been in place in Sweden, with the exception of parental leave at the basic level. The latter came into force in August 2022.

The analysis shows that the most obvious changes in fathers' uptake of parental leave occurred in parallel with the introduction of the reserved months, especially the first reserved month. This has also been demonstrated in other studies.⁶⁹

We show that when the first month was introduced, the proportion of fathers using no days was halved from 53 percent to 26 percent. The first reserved month led to fathers of all backgrounds starting to use parental leave. But despite the reserved months, one third of the children born in 2017 has a father who used fewer than 30 days of parental leave during the child's first two years.

Fathers' uptake has also changed in between the reforms, and in the 1990s the proportion that used no days actually increased, albeit temporarily. This probably relates to the economic crisis of the 1990s and the reduced income replacement level within the Swedish parental insurance. This

⁶⁷ Directive (EU) 2019/1158.

⁶⁸ Article 5.1 and 5.2 in Directive (EU) 2019/1158.

⁶⁹ Swedish Social Insurance Agency, 2019:2; Duvander and Johansson, 2012.

suggests that both reforms and other changes in society, not least economic changes, affect whether fathers use parental leave.

The reserved months have been a well-functioning tool to achieve the political goal to increase fathers' use of parental leave.⁷⁰ The aim when introducing the reserved months was to achieve a more gender equal care for the children.⁷¹ However, after the first reserved month, the following months have not directly affected the groups of fathers not using any parental leave.⁷² As this indicates that their children get less time with their parents, it can be considered a problem.

This study is not able to answer the question of how to make these fathers use a larger share of parental leave. Nevertheless, our results indicate that other measures, apart from those already in place, are required. One measure could be to raise the earnings ceiling for paid parental leave. This could be important for fathers with the highest income.

There are also other factors beyond the parental leave regulations that may affect whether fathers use parental leave, for instance, that both the mother and father are well established in the labour market. Otherwise, they may not have access to the income-related parental leave. Decisions about how to divide parental leave can also depend on other factors, for example, practical conditions, workplace culture and expectations or ideas about motherhood and fatherhood. Such expectations and beliefs can make it more difficult to make claims for parental leave in relation to the employer and within the parental couple.⁷³ These are factors beyond the scope of this study.

We want to stress that the current regulations regarding Swedish parental leave, with three months earmarked for each parent, assumes that both parents make use of the paid parental leave to gain access to all the parental leave days. For many parents, the reserved months have contributed to a more equal uptake of parental leave,⁷⁴ and from a child's perspective, the reserved months have given many of them an opportunity for early contact and more access to both parents. However, our results show that there is still one third of fathers who do not use any, or only a few, days of parental leave. In these cases, the mothers shoulder the care responsibility and use the parental leave, but with access to fewer days compared to when days were not reserved for each parent. If the father does not use his reserved share, the days with paid parental leave barely cover the period until the child is entitled to start preschool, which in the Swedish context is when the child turns one year old. This may in turn force the mother to stay at home without economic compensation. We find this to be a neglected consequence, and as we now show that this is a significant-sized group, more focus on how these mothers and these children fare is impertinent.

Although Swedish parental leave is gender-neutral in its construction, it leads to quite different situations for mothers and fathers. A contributing

⁷⁰ See Proposition 2014/15:124.

⁷¹ See Proposition 1993/94:147; Proposition 2000/01:44.

⁷² Swedish Social Insurance Agency, 2019:2.

⁷³ See Evertsson et al., 2018; Swedish Social Insurance Agency, 2018:3; Hobson et al., 2011; Hobson et al., 2013; Allard et al., 2011; Haas et al., 2002.

⁷⁴ Swedish Social Insurance Agency, 2013:8; Duvander and Johansson, 2012.

factor is the fact that women are still expected to shoulder the care responsibility for the children, even when it is financially, or in other ways, difficult to do so. Moreover, as this study has shown, there seem to be higher thresholds for men in prioritising parental leave if this involves financial costs. This can be formulated as gender norms still underpinning many of our choices and much of our behaviour. In this study, this is most visible among couples where the father has fewer resources, for example, a low income or low education. In these situations, the mother ends up in a rather vulnerable situation as she gains access to fewer days of paid leave when the father does not use his non-transferable share.

In the light of the objective of parental leave, that is, to enable both parents to combine work and family life and ensure the child's entitlement to time with both parents,⁷⁵ it is important to examine to what extent the aim of the parental leave is met among the groups where only one parent uses parental leave. Such a study should particularly focus on these parents' capabilities to combine care and their finances. How these parents cope is relevant in several respects: the child's perspective, gender equality, and equality between different socio-economic groups of parents.

⁷⁵ SOU 1972:34.

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Appendix

Variables

The model includes several variables related to the father's labour market position, such as income, educational attainment, employment status, and work sector. These variables are only available on a yearly basis and relate to the year prior to the child's birth.

The father's income relates to the annual pensionable income, which includes several types of taxable incomes, apart from employment earnings, for instance, transfers from the Swedish social security system such as unemployment benefit, sickness benefit or paid parental leave. We categorise the income variable into quintiles with each income category containing an equal number of fathers within a specific year. We also include the mother's share of the parents' total income, also based on the annual income the year prior to the child's birth.

Father's educational level is divided into primary, secondary, and tertiary level. Father's labour market status is divided into employed, self-employed and not in paid work. Father's work sector is divided into four categories: state sector (work within the central government and agencies), municipal sector (municipalities and local governments), county sector (for instance, government and public health), and private sector. The three first sectors add up to the public sector.

In the additional analysis, we combine the characteristics of both parents. Both parents' education is divided into four categories: both have low education, father low education/mother high education, father high education/mother low education, and both have high education. In this variable, low education refers to secondary level or less. Both parents' labour market status is divided into seven categories: both employed, father employed/mother not in paid work, mother employed/father not in paid work, both self-employed, only father self-employed, only mother self-employed and none in paid work. Both parents' work sector is divided into four categories: both work in the public sector, both work in the private sector, father work in private sector/mother work in public sector, and father work in public sector/mother work in private sector.

The analysis also includes demographic characteristics, such as the child's birth order, the father's age at the child's birth, father's place of residence, and if the father is Swedish- or foreign-born combined with father's age at immigration. In our additional analysis we combine both parents' origin: both are born in Sweden, both are foreign-born, father foreign-born/mother born in Sweden, and father born in Sweden/mother foreign-born.

Father's place of residence is divided into three categories. *Metropolitan areas* are Stockholm, Gothenburg, and Malmoe as well as nearby municipalities. *Larger municipalities* refer to cities with between 40,000 and 200,000 inhabitants as well as municipalities near larger municipalities. *Smaller municipalities* refer to municipalities with less than 40,000 inhabitants. These are based on the Swedish Association of Local Authorities and Regions' classification of regions.⁷⁶

In all models we also include several control variables: whether either parent has children from previous relations, whether the father used the so-called "daddy-days" (10 days of temporary paid parental leave when the child is born), the child's age when the father became a legal guardian, the child's age when the father and child first lived together, if the father separates from the child during the first two years after birth, whether the father immigrated to Sweden after the child was born, and whether the father emigrated during the child's first two years.

Tables

Table A 1. Number of children during the years 1994–2017 by the father's uptake of parental leave days (row percent)

Year	0 days		1–29 days		30–90 days		≥91 days		Total
	No.	%	No.	%	No.	%	No.	%	
1994	53,672	53 %	18,448	18 %	15,661	16 %	13,006	13 %	100,787
1995	24,572	26 %	27,485	29 %	31,503	34 %	9,762	10 %	93,322
1996	26,389	30 %	26,219	30 %	25,236	29 %	8,726	10 %	86,570
1997	26,943	33 %	26,001	31 %	21,398	26 %	8,376	10 %	82,718
1998	27,383	33 %	25,353	31 %	20,823	25 %	8,618	10 %	82,177
1999	27,228	33 %	24,576	30 %	20,645	25 %	9,339	11 %	81,788
2000	27,339	32 %	24,721	29 %	21,463	25 %	10,656	13 %	84,179
2001	26,681	32 %	23,215	28 %	21,996	26 %	12,193	15 %	84,085
2002	23,202	26 %	18,448	21 %	30,682	35 %	16,084	18 %	88,416
2003	24,003	26 %	18,081	20 %	31,240	34 %	18,313	20 %	91,637
2004	25,153	27 %	18,092	19 %	31,379	33 %	20,099	21 %	94,723
2005	25,161	26 %	17,857	19 %	30,180	32 %	22,049	23 %	95,247
2006	25,900	26 %	18,300	19 %	30,516	31 %	24,083	24 %	98,799
2007	26,966	27 %	17,934	18 %	29,911	30 %	25,731	26 %	100,542
2008	28,183	28 %	17,255	17 %	29,140	29 %	27,456	27 %	102,034
2009	28,819	28 %	17,463	17 %	28,785	28 %	29,059	28 %	104,126
2010	29,595	28 %	17,612	17 %	28,467	27 %	30,799	29 %	106,473
2011	27,845	27 %	17,355	17 %	28,512	27 %	30,372	29 %	104,084
2012	27,831	26 %	20,753	20 %	30,212	29 %	26,527	25 %	105,323
2013	26,380	25 %	18,184	17 %	29,630	28 %	31,278	30 %	105,472
2014	24,529	23 %	17,441	16 %	30,691	29 %	34,719	32 %	107,380
2015	22,727	21 %	17,322	16 %	31,513	29 %	35,873	33 %	107,435
2016	20,492	19 %	16,111	15 %	33,393	30 %	39,710	36 %	109,706
2017	19,730	18 %	16,202	15 %	32,715	30 %	38,697	36 %	107,344
Total	646,723	28 %	480,428	21 %	665,691	29 %	531,525	23 %	2,324,367

Source: Authors' calculations based on register data.

⁷⁶ Swedish Association of Local Authorities and Regions, *Kommungruppsindelning*.

Table A 2. Number of children during the years 1994–2017 by the mother’s uptake of parental leave days (row percent)

Year	0 days		1–29 days		30–90 days		≥91 days		Total
	No.	%	No.	%	No.	%	No.	%	
1994	2,123	2.1 %	282	0.3 %	994	1.0 %	97,388	97 %	100,787
1995	1,631	1.7 %	186	0.2 %	979	1.0 %	90,526	97 %	93,322
1996	1,466	1.7 %	205	0.2 %	867	1.0 %	84,032	97 %	86,570
1997	1,344	1.6 %	188	0.2 %	892	1.1 %	80,294	97 %	82,718
1998	1,258	1.5 %	207	0.3 %	865	1.1 %	79,847	97 %	82,177
1999	1,387	1.7 %	203	0.2 %	878	1.1 %	79,320	97 %	81,788
2000	1,553	1.8 %	285	0.3 %	1,072	1.3 %	81,269	97 %	84,179
2001	1,737	2.1 %	249	0.3 %	1,135	1.3 %	80,964	96 %	84,085
2002	1,593	1.8 %	252	0.3 %	1,258	1.4 %	85,313	96 %	88,416
2003	1,679	1.8 %	232	0.3 %	1,258	1.4 %	88,468	97 %	91,637
2004	1,733	1.8 %	280	0.3 %	1,431	1.5 %	91,279	96 %	94,723
2005	1,885	2.0 %	323	0.3 %	1,564	1.6 %	91,475	96 %	95,247
2006	2,050	2.1 %	342	0.3 %	1,681	1.7 %	94,726	96 %	98,799
2007	2,233	2.2 %	371	0.4 %	1,674	1.7 %	96,264	96 %	100,542
2008	2,450	2.4 %	352	0.3 %	1,786	1.8 %	97,446	96 %	102,034
2009	2,572	2.5 %	414	0.4 %	1,914	1.8 %	99,226	95 %	104,126
2010	2,631	2.5 %	481	0.5 %	2,022	1.9 %	101,339	95 %	106,473
2011	2,559	2.5 %	445	0.4 %	2,041	2.0 %	99,039	95 %	104,084
2012	2,555	2.4 %	529	0.5 %	2,317	2.2 %	99,922	95 %	105,323
2013	2,701	2.6 %	605	0.6 %	3,252	3.1 %	98,914	94 %	105,472
2014	2,480	2.3 %	494	0.5 %	2,346	2.2 %	102,060	95 %	107,380
2015	2,473	2.3 %	534	0.5 %	2,621	2.4 %	101,807	95 %	107,435
2016	2,415	2.2 %	612	0.6 %	2,839	2.6 %	103,840	95 %	109,706
2017	2,185	2.0 %	637	0.6 %	2,700	2.5 %	101,822	95 %	107,344
Total	48,693	2.1 %	8,708	0.4 %	40,386	1.7 %	2,226,580	96 %	2,324,367

Source: Authors’ calculations based on register data.

Table A 3. Fathers of children born during the years 1994–2017, descriptive statistics for background variables in the analyses, column percent

Variable	Category	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Father's income	Quintile 1	17.7	17.7	17.8	18.3	18.6	18.7	18.8	19.0	19.1	19.0	19.1	19.0	18.9	18.9	18.8	18.8	18.8	18.8	18.7	18.8	18.8	18.8	18.2	18.8	
	Quintile 2	18.7	18.6	18.6	19.0	19.2	19.3	19.5	19.5	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.4	19.4	19.4	19.4	19.5	19.5	19.6	19.6	19.6	
	Quintile 3	19.1	19.0	19.0	19.2	19.5	19.6	19.8	19.7	19.8	19.7	19.8	19.7	19.7	19.7	19.6	19.6	19.6	19.6	19.6	19.7	19.7	19.7	19.9	19.8	
	Quintile 4	19.3	19.1	19.0	19.3	19.6	19.6	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.7	19.7	19.6	19.6	19.7	19.7	19.7	19.7	19.8	20.0	19.8
	Quintile 5	19.2	19.1	19.1	19.4	19.6	19.6	19.9	19.8	19.9	19.8	19.8	19.8	19.8	19.8	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.8	19.8	20.0	19.9
	Unknown income	6.0	6.4	6.4	4.8	3.4	3.1	2.2	2.2	1.8	2.1	2.1	2.2	2.1	2.4	2.7	2.9	2.9	2.8	2.9	2.7	2.6	2.3	2.3	2.1	
Mother's share of both parents' income	<45 percent	55.9	55.1	55.9	57.3	62.3	61.9	59.8	60.1	59.8	58.8	58.3	57.8	58.2	57.8	57.9	57.3	56.2	56.6	57.1	56.6	56.5	56.1	55.7	55.9	
	45–55 percent	14.9	15.1	15.5	16.6	17.5	17.1	24.3	24.2	24.3	24.6	24.8	24.7	24.3	24.3	24.1	24.4	24.1	23.8	23.7	24.3	24.3	24.5	24.7	14.9	
	>55 percent	14.5	14.0	13.1	13.9	14.6	14.1	13.1	13.1	13.7	14.2	14.4	15.0	14.9	14.9	14.7	14.7	16.0	16.0	15.5	15.7	16.0	16.4	16.5	14.5	
	Unknown income	14.6	15.8	15.6	12.2	5.5	6.9	2.8	2.7	2.2	2.5	2.5	2.5	2.6	3.0	3.3	3.6	3.7	3.6	3.7	3.4	3.2	3.0	3.0	14.6	
Father's education	Primary level	16.4	16.3	16.1	15.5	15.4	15.4	12.3	11.7	11.3	11.1	11.0	11.1	11.2	11.5	11.7	11.8	11.9	12.0	12.0	12.1	12.2	11.8	12.1		
	Secondary level	52.3	53.2	52.8	52.6	52.3	52.0	51.2	52.2	51.8	50.5	49.6	48.6	47.6	47.0	46.2	45.6	45.3	45.2	44.6	44.6	44.6	44.3	44.2	43.8	
	Tertiary level	25.1	26.8	27.7	28.4	29.2	29.2	30.5	32.6	33.5	35.3	36.3	37.1	37.8	37.9	38.7	39.2	39.4	39.4	39.7	39.7	39.3	39.5	39.7	39.7	
	Unknown education	6.2	3.7	3.4	3.6	3.1	3.3	3.0	2.9	3.0	2.9	3.1	3.3	3.5	3.9	3.5	3.6	3.5	3.5	3.5	3.7	3.8	4.0	3.9	4.3	4.4
Parents' education	Both low education	54.7	55.2	54.4	53.3	52.4	51.5	50.2	47.8	46.3	44.2	42.0	40.5	39.3	38.2	37.6	36.7	36.2	36.3	35.9	35.3	35.6	35.2	34.6	34.4	
	F low/M high education	14.2	15.5	16.1	16.9	17.7	17.9	19.5	21.5	22.9	24.7	26.0	26.9	28.0	28.3	29.3	29.8	30.3	30.3	30.9	31.0	30.6	30.9	30.9	31.1	
	F high/M low education	11.3	12.4	12.4	12.5	12.9	13.3	13.7	14.7	15.0	15.7	16.5	16.9	17.2	17.6	17.8	18.4	18.6	18.7	18.6	19.2	19.1	19.2	19.5	19.3	
	Both high education	10.3	10.9	11.0	10.8	10.8	10.5	10.3	10.4	10.0	10.0	9.6	9.4	9.1	8.8	8.7	8.5	8.3	8.2	8.0	7.9	7.8	7.7	7.8	7.7	
	Unknown education	9.5	6.1	6.2	6.5	6.2	6.7	6.3	5.6	5.8	5.4	6.0	6.2	6.4	7.1	6.5	6.6	6.6	6.5	6.5	6.6	6.9	7.0	7.2	7.5	
Father's employment status	Employed	70.9	73.6	75.5	74.9	73.6	75.4	77.3	79.3	80.0	78.9	78.5	77.1	76.7	77.6	78.5	78.2	75.3	76.7	77.6	77.6	77.6	77.8	78.0	78.6	
	Self-employed	4.0	4.0	4.0	4.0	6.2	6.0	5.9	6.0	5.6	6.3	6.4	7.7	8.0	7.7	7.8	7.9	7.8	7.7	7.7	7.6	7.4	7.2	7.1	6.8	
	Not in paid work	22.8	20.7	18.8	19.4	18.7	17.2	15.4	13.2	12.9	13.1	13.6	13.4	13.3	12.7	11.9	12.1	15.2	13.6	12.6	12.7	12.9	12.7	12.3	12.2	
	Unknown employment status	2.3	1.7	1.7	1.7	1.5	1.3	1.4	1.5	1.5	1.7	1.6	1.8	2.0	1.9	1.8	1.8	1.7	1.9	2.1	2.1	2.1	2.3	2.6	2.3	
Parents' employment status	Both employed	54.2	56.1	56.8	57.4	56.0	59.0	61.0	63.1	64.9	65.0	63.9	62.1	61.6	63.0	64.4	64.2	60.2	61.6	62.2	62.6	62.0	62.3	63.1	64.0	
	F employed/M not in paid work	15.9	16.7	17.8	16.7	16.5	15.2	15.1	14.9	13.9	12.6	13.3	13.4	13.6	13.1	12.5	12.4	13.5	13.3	13.6	13.3	13.8	13.8	13.2	12.9	
	M employed/F not in paid work	11.5	9.0	7.6	7.5	7.1	6.9	6.4	5.9	6.2	6.5	6.5	6.4	6.3	5.8	5.2	5.0	6.4	5.8	5.6	5.6	5.7	5.7	5.5	5.4	
	Both self-employed	0.4	0.4	0.4	0.4	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.5	
	Only F self-employed	3.6	3.6	3.6	3.7	5.5	5.3	5.3	5.4	5.0	5.6	5.7	7.0	7.2	7.0	7.1	7.2	7.0	7.0	6.9	6.7	6.5	6.4	6.3		
	Only M self-employed	1.0	1.0	1.1	1.1	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.8	1.8	1.9	1.8	1.9	2.0	2.1	2.1	2.0	2.0	2.0	2.0	1.9	
	None in paid work	13.3	13.2	12.7	13.3	12.9	11.4	10.2	8.6	8.0	8.0	8.4	8.5	8.8	8.6	8.2	8.6	10.2	9.4	8.8	9.0	9.0	9.1	9.2	8.9	
Father's work sector	State sector	11.2	10.8	9.8	9.9	9.5	8.8	7.7	7.5	7.3	7.8	7.3	7.2	7.1	6.9	6.8	6.7	7.1	6.9	7.0	6.8	6.9	6.8	6.7	6.6	
	Municipal sector	9.1	8.8	8.4	7.9	7.6	7.5	7.7	7.0	7.2	7.6	7.9	7.6	7.5	7.4	7.2	7.0	7.0	7.1	7.0	6.9	7.1	7.4	7.8	8.3	
	County council	2.8	2.7	2.2	1.9	1.8	1.8	1.9	1.9	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.2	2.3	2.3	
	Private sector	64.0	64.8	67.6	67.8	69.3	71.0	72.9	75.0	75.5	74.2	74.1	73.9	73.9	74.1	75.0	75.1	73.5	73.6	74.4	74.4	73.6	73.5	73.0	72.8	
	Unknown work sector	12.9	12.9	12.0	12.4	11.9	11.0	9.8	8.6	8.1	8.5	8.9	9.3	9.6	9.4	8.9	9.2	10.4	10.4	9.7	9.8	10.3	10.2	10.2	10.1	

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Variable	Category	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Parent's work sector	Both public sector	14.1	13.2	11.9	11.5	10.7	10.3	9.9	9.1	9.3	9.7	9.6	9.5	9.4	9.3	9.2	8.8	8.8	8.7	8.6	8.4	8.5	8.7	8.8	9.2
	Both private sector	27.3	28.1	30.5	31.0	32.9	34.2	36.4	39.0	39.4	38.6	37.9	38.0	38.0	38.1	39.1	40.0	38.9	38.9	39.9	40.1	39.4	38.9	38.7	38.0
	F private/M public	28.6	28.1	28.7	28.2	27.5	28.1	28.3	28.2	28.6	28.6	28.5	27.6	27.3	27.6	27.4	26.9	25.5	25.5	25.2	25.2	25.0	25.1	25.4	26.2
	F public/M private	6.0	5.9	5.7	5.7	5.7	5.6	5.5	5.6	5.6	5.9	5.7	5.6	5.5	5.5	5.5	5.6	5.7	5.6	5.7	5.7	5.8	5.7	5.9	5.8
	Unknown work sector	24.0	24.7	23.2	23.6	23.3	21.9	19.9	18.1	17.1	17.2	18.3	19.2	19.8	19.6	18.8	18.7	21.1	21.3	20.6	20.6	21.3	21.5	21.1	20.9
Child's birth order	First child	45.2	46.2	47.9	48.6	48.6	49.7	51.3	51.9	52.8	52.4	51.9	51.5	51.2	51.4	51.4	51.1	50.3	49.8	50.0	49.2	48.5	48.6	48.0	47.9
	Second child	36.9	36.7	36.4	36.4	36.2	35.3	33.8	34.2	34.0	34.3	35.0	35.6	35.7	35.3	35.0	35.6	36.0	36.4	36.2	36.6	36.6	36.3	36.1	35.9
	≥Third child	17.9	17.1	15.7	15.0	15.2	14.9	14.8	13.9	13.2	13.3	13.1	12.9	13.1	13.3	13.6	13.3	13.7	13.7	14.1	14.9	15.1	15.8	16.2	
Children from previous relations	No child from previous relation	86.3	85.7	85.2	84.8	84.3	84.0	83.8	83.8	83.9	84.1	84.5	84.7	85.2	85.2	85.8	86.0	86.4	86.4	86.3	86.5	86.7	87.0	87.2	87.4
	Mother yes/Father no	5.5	5.7	6.1	6.2	6.4	6.6	6.5	6.7	6.5	6.6	6.3	6.3	6.0	6.0	5.6	5.4	5.2	5.4	5.3	5.3	5.2	5.2	5.0	5.1
	Mother no/Father yes	6.2	6.3	6.4	6.7	6.8	6.9	7.0	7.0	7.0	6.9	6.9	6.8	6.7	6.7	6.6	6.6	6.3	6.2	6.4	6.3	6.1	5.9	5.9	5.6
	Both have child from previous relation	2.0	2.2	2.3	2.3	2.5	2.5	2.7	2.5	2.6	2.4	2.3	2.2	2.1	2.2	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9
Use of "daddy-days"	Used "daddy-days"	32.3	31.4	33.3	34.6	34.3	34.3	33.9	33.5	33.5	32.2	31.1	34.0	34.5	31.8	32.0	34.3	35.0	33.1	33.0	33.4	32.3	31.3	31.2	30.9
	Did not use "daddy-days"	67.7	68.6	66.7	65.4	65.7	65.7	66.1	66.5	66.5	67.8	68.9	66.0	65.5	68.2	68.0	65.7	65.0	66.9	67.0	66.6	67.7	68.7	68.8	69.1
Child's age when father becomes legal guardian	At birth	64.3	63.3	62.8	62.2	62.2	62.5	63.4	63.8	63.3	63.9	65.3	67.6	68.1	69.3	66.7	66.4	68.0	70.1	71.4	72.6	72.6	73.6	73.1	72.8
	During 1–3 months	30.2	30.6	31.2	32.5	32.6	32.9	32.6	31.9	32.7	32.2	31.0	28.8	28.3	27.3	29.8	29.9	28.4	26.6	25.3	24.2	24.2	23.4	23.7	24.0
	During 4–12 months	2.6	2.8	2.9	2.8	3.0	2.9	2.6	2.9	2.8	2.5	2.4	2.3	2.2	2.4	2.4	2.4	2.1	2.1	2.0	2.0	1.9	1.8	1.8	
	During the 2nd year	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4
	Not during the first 2 years	2.4	2.7	2.4	1.9	1.7	1.3	1.1	1.0	1.0	1.0	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	1.0	1.0
Child's age when father and child first live together	0–2 months	65.3	66.8	64.4	65.2	66.7	67.7	66.3	86.4	86.4	83.7	82.2	87.6	88.4	87.9	88.1	87.5	87.5	91.4	91.8	92.2	92.5	92.7	92.5	92.4
	3–7 months	10.9	10.4	11.5	11.1	10.8	10.6	21.2	1.9	2.1	2.5	2.6	2.1	1.8	1.9	1.6	1.6	3.7	1.4	1.1	1.1	1.0	1.0	1.0	1.1
	8–12 months	8.4	7.6	9.1	8.5	7.7	8.6	1.7	1.6	1.5	2.0	2.1	1.6	1.4	1.6	1.4	1.6	2.8	0.9	0.8	0.8	0.7	0.7	0.7	0.8
	13–24 months	3.5	3.7	3.8	4.0	4.4	3.2	2.3	2.3	2.3	2.9	3.0	2.0	2.2	1.9	1.9	4.2	1.6	1.1	1.1	1.0	0.9	1.0	1.1	1.1
	Not the first 2 years	11.8	11.5	11.2	11.3	10.5	9.8	8.5	7.9	7.7	8.9	10.2	6.8	6.3	6.6	7.0	5.0	4.5	5.2	5.2	4.9	4.8	4.8	4.6	4.6
Father separates from child	Live with the child at age 2	85.6	85.9	85.8	85.5	85.2	85.2	82.9	76.8	79.1	82.7	83.2	87.2	88.1	88.1	87.8	89.9	90.9	90.2	90.2	90.6	90.8	91.1	91.3	91.3
	Does not live with the child at age 2	14.4	14.1	14.2	14.5	14.8	14.8	17.1	23.2	20.9	17.3	16.8	12.8	11.9	11.9	12.2	10.1	9.1	9.8	9.8	9.4	9.2	8.9	8.7	8.7
Father's age at child's birth	≤25 years	11.4	10.9	10.5	9.7	8.8	8.6	8.3	7.9	7.7	7.4	7.0	7.1	7.0	7.4	7.8	7.8	7.8	8.0	7.9	8.0	7.6	7.3	6.8	6.3
	26–30 years	33.9	32.7	31.4	30.5	28.6	27.7	27.4	26.8	26.2	24.9	24.3	23.3	22.6	22.7	22.8	22.9	23.0	22.9	23.1	23.2	24.0	24.6	24.9	24.9
	31–35 years	29.9	31.3	32.6	33.8	34.9	35.4	35.0	34.7	35.0	35.2	35.3	36.1	36.1	35.0	34.3	33.7	32.9	32.5	32.6	32.9	32.9	32.7	32.6	33.0
	36–40 years	16.2	16.5	16.5	16.7	17.7	18.4	19.1	20.2	20.8	21.8	22.1	21.9	22.1	22.1	22.1	22.5	23.0	23.1	22.8	22.4	21.7	21.6	21.9	21.9
	41–45 years	5.9	5.8	6.1	6.4	6.9	6.9	7.0	7.1	7.0	7.3	7.8	8.1	8.5	9.0	9.1	9.1	9.1	9.0	9.1	9.1	9.2	9.3	9.4	9.3
>45 years	2.6	2.8	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.3	3.5	3.5	3.6	3.7	4.0	4.0	4.2	4.5	4.4	4.5	4.6	4.4	4.4	4.5	

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Variable	Category	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Father origin and age at immigration	Native-born	84.7	83.6	83.1	82.7	82.4	82.2	82.1	81.9	81.9	81.5	81.3	80.5	80.1	78.8	78.1	77.2	76.7	75.8	75.0	74.2	72.9	71.8	70.7	69.5	
	Foreign-born/<15 years	2.6	2.6	2.7	2.8	2.8	2.9	3.1	3.0	3.1	3.2	3.2	3.4	3.6	3.7	4.0	4.1	4.2	4.5	4.8	4.9	5.1	5.2	5.3	5.3	
	Foreign-born/15–20 years	1.4	1.4	1.6	1.7	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.4	2.4	2.4	2.5	2.5	2.5	2.7	2.6	2.7	
	Foreign-born/>20 years	10.2	11.3	11.8	12.1	12.3	12.5	12.4	12.6	12.5	12.8	13.0	13.5	13.7	14.7	15.1	15.9	16.3	16.8	17.3	18.0	19.1	19.9	21.0	22.2	
	Unknown age at arrival	1.1	1.1	0.8	0.7	0.7	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	
Parents' origin	Both native-born	79.8	78.6	78.2	77.6	77.2	76.9	76.7	76.3	76.1	75.7	75.2	74.3	73.8	72.3	71.5	70.6	69.9	69.1	68.3	67.5	66.4	65.3	64.4	63.3	
	Both foreign-born	10.1	11.0	11.4	11.8	12.0	12.1	12.0	12.0	12.2	12.6	13.0	13.6	14.6	15.2	15.9	16.5	17.2	17.9	18.6	19.8	20.7	21.9	23.1		
	F foreign-/M native-born	5.2	5.4	5.5	5.6	5.6	5.7	6.0	6.1	6.1	6.3	6.1	6.5	6.4	6.6	6.8	6.9	6.8	7.0	7.1	7.2	7.3	7.4	7.4	7.3	
	F native-/M foreign-born	4.9	4.9	4.9	5.1	5.2	5.2	5.3	5.6	5.8	5.8	6.1	6.2	6.3	6.5	6.6	6.6	6.7	6.8	6.6	6.6	6.6	6.5	6.4	6.3	
Father immigrates after child's birth	Did not immigrate 6 months after birth	99.7	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.6	99.6	99.6	99.6	99.6	99.4	99.3	
	Immigrates 6 months after birth	0.3	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.7	
Father emigrates	No emigration during the first 2 yrs.	99.9	99.8	99.7	99.7	99.5	99.3	99.2	99.3	99.4	99.3	99.4	99.3	99.4	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.4	99.3	99.4	99.4
	When the child is 1–12 months	0.0	0.0	0.1	0.1	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
	When the child is 13–24 months	0.1	0.1	0.2	0.2	0.3	0.5	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.3	
Father's place of residence	Metropolitan areas	33.5	33.5	34.5	35.5	36.5	36.9	37.3	38.4	39.3	39.6	40.1	40.4	40.6	40.6	41.1	41.1	41.4	41.0	41.1	41.5	41.3	40.9	40.9	40.2	
	Larger municipalities	38.2	38.3	38.0	38.1	37.4	37.6	37.4	37.0	36.8	36.8	36.7	36.8	36.8	36.9	36.8	36.6	36.4	36.7	36.6	36.3	36.4	36.5	36.5	36.4	
	Smaller municipalities	27.2	27.0	26.5	25.9	25.2	25.1	24.8	24.0	23.4	23.1	22.8	22.4	22.1	22.0	21.5	21.6	21.3	21.3	21.2	21.1	21.2	21.5	21.6	22.4	
	Unknown place of residence	1.1	1.2	1.0	0.6	0.9	0.4	0.4	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.9	1.0	1.1	1.1	1.1	1.1	1.0	0.9	
Total numbers		100,787	93,322	86,570	82,718	82,177	81,788	84,179	84,085	88,416	91,637	94,723	95,247	98,799	100,542	102,034	104,126	106,473	104,084	105,323	105,472	107,380	107,435	109,706	107,344	

Note: F=father; M=mother.

Source: Authors' calculations based on register data.

Table A 4. Unadjusted proportion of fathers using 0 days, 1–29 days or ≥30 days of parental leave, fathers to children born 2015–2017

	<i>0 days</i>	<i>1–29 days</i>	<i>≥30 days</i>	<i>Total number</i>
Father's income				
Quintile 1	37 %	13 %	50 %	60,361
Quintile 2	18 %	16 %	66 %	63,551
Quintile 3	11 %	17 %	72 %	64,280
Quintile 4	10 %	17 %	73 %	64,486
Quintile 5	14 %	14 %	72 %	64,574
Mother's share of both parents' income				
<45 percent	18 %	18 %	64 %	180,837
45–55 percent	11 %	13 %	76 %	80,842
>55 percent	26 %	13 %	61 %	53,218
Father's education				
Primary level	34 %	15 %	50 %	39,101
Secondary level	17 %	19 %	63 %	143,095
Tertiary level	14 %	11 %	75 %	128,596
Parents' education				
Both low education	23 %	20 %	56 %	112,731
F low/M high education	11 %	10 %	79 %	100,426
F high/M low education	15 %	16 %	69 %	62,750
Both high education	22 %	17 %	61 %	25,046
Father's employment status				
Employed	13 %	16 %	71 %	253,671
Self-employed	27 %	16 %	56 %	22,818
Not in paid work	48 %	12 %	41 %	40,277
Parents' employment status				
Both employed	10 %	16 %	74 %	204,922
Father employed/mother not in paid work	25 %	17 %	58 %	43,118
Mother employed/father not in paid work	44 %	14 %	43 %	17,900
Both self-employed	28 %	11 %	62 %	2,039
Only father self-employed	27 %	17 %	56 %	20,779
Only mother self-employed	17 %	12 %	70 %	6,389
None in paid work	54 %	10 %	37 %	29,338
Father's work sector				
State sector	10 %	12 %	78 %	21,663
Municipal sector	16 %	14 %	71 %	25,324
County sector	8 %	10 %	82 %	7,332
Private sector	16 %	17 %	67 %	237,117
Parent's work sector				
Both public sector	9 %	12 %	80 %	28,980
Both private sector	14 %	17 %	69 %	124,977
Father private/mother public	12 %	17 %	71 %	83,029
Father public/mother private	10 %	13 %	77 %	18,796
Child's birth order				
First child	16 %	14 %	70 %	156,385
Second child	19 %	16 %	65 %	117,133
≥Third child	31 %	16 %	53 %	50,967
Children from previous relations				
No child from previous relation (ref.)	19 %	15 %	66 %	282,899
Mother yes/Father no	24 %	15 %	61 %	16,467
Mother no/Father yes	26 %	16 %	59 %	18,891
Both have child from previous relation	24 %	15 %	60 %	6,228
Use of "daddy-days"				
Used "daddy-days"	11 %	16 %	73 %	223,575
Did not use "daddy-days"	39 %	13 %	48 %	100,910
Child's age when father becomes legal guardian				
At birth	18 %	15 %	67 %	237,462
During 1–3 months	18 %	17 %	66 %	76,909
During 4–12 months	34 %	16 %	50 %	5,870
During 2nd year	73 %	15 %	12 %	1,249
Not during first 2 years	88 %	5 %	7 %	2,995

cont.

Child's age when father and child first live together

0–2 months	18 %	15 %	67 %	300,298
3–7 months	32 %	15 %	54 %	3,327
8–12 months	36 %	14 %	51 %	2,361
13–24 months	46 %	12 %	43 %	3,343
Not the first 2 years	41 %	13 %	46 %	15,156

Father separates from child

Live with the child at age 2	41 %	14 %	45 %	28,452
Does not live with the child at age 2	17 %	15 %	67 %	296,033

Father emigrates

No emigration during the first 2 yrs.	19 %	15 %	65 %	322,423
When the child is 1–12 months	64 %	9 %	28 %	936
When the child is 13–24 months	46 %	6 %	47 %	1,126

Father's age at child's birth

≤25 years	22 %	19 %	59 %	22,059
26–30 years	17 %	17 %	66 %	80,483
31–35 years	17 %	15 %	68 %	106,381
36–40 years	20 %	14 %	66 %	70,794
41–45 years	25 %	14 %	61 %	30,333
>45 years	34 %	13 %	53 %	14,435

Father origin and age at immigration

Native-born	12 %	15 %	72 %	229,415
Foreign-born/<15 years	24 %	18 %	58 %	17,096
Foreign-born/15–20 years	34 %	17 %	49 %	8,666
Foreign-born/>20 years	39 %	14 %	46 %	68,229

Parents' origin

Both native-born	12 %	16 %	73 %	208,732
Both foreign-born	40 %	15 %	45 %	71,140
Father foreign-/mother native-born	25 %	16 %	59 %	23,930
Father native-/mother foreign-born	17 %	13 %	70 %	20,683

Father immigrates after child's birth

Did not immigrate 6 months after birth	19 %	15 %	66 %	322,589
Immigrates 6 months after birth	76 %	7 %	17 %	1,896

Father's place of residence

Metropolitan areas	19 %	13 %	68 %	132,041
Larger municipalities	19 %	16 %	65 %	118,279
Smaller municipalities	20 %	19 %	61 %	70,874

Child's birth year

2015	21 %	16 %	63 %	107,435
2016	19 %	15 %	67 %	109,706
2017	18 %	15 %	67 %	107,344

Total proportion	19 %	15 %	65 %	
Total number	62,949	49,635	211,901	324,485

Source: Authors' calculations based on register data.

Table A 5. Multinomial logistic regression. Father's relative risk ratios for using 0 days or 1–29 days as opposed to using ≥30 days of parental leave (base outcome). Fathers to children born in 2015–2017

	Model 1		Model 2	
	0 days	1–29 days	0 days	1–29 days
Father's income				
Quintile 1	1.84 ***	1.02	1.78 ***	1.05
Quintile 2	1.37 ***	0.98	1.32 ***	0.98
Quintile 3 (ref.)				
Quintile 4	1.01	1.01	1.05 *	1.02
Quintile 5	1.43 ***	0.99	1.55 ***	1.04 *
Mother's share of both parents' income				
<45 percent	1.70 ***	1.47 ***	1.47 ***	1.43 ***
45–55 percent (ref.)				
>55 percent	1.09 ***	1.07 ***	1.07 ***	1.03
Father's education				
Primary level	1.73 ***	1.51 ***		
Secondary level	1.62 ***	1.78 ***		
Tertiary level				
Parents' education				
Both low education			2.30 ***	2.44 ***
F low/M high education			1.56 ***	1.76 ***
F high/M low education			1.90 ***	2.03 ***
Both high education				
Father's employment status				
Employed (ref.)				
Self-employed	2.07 ***	1.27 ***		
Not in paid work	1.51 ***	1.18 ***		
Parents' employment status				
Both employed (ref.)				
F employed/M not in paid work			1.17 ***	0.91 ***
M employed/F not in paid work			1.79 ***	1.42 ***
Both self-employed			1.61 ***	0.71 ***
Only F self-employed			2.20 ***	1.30 ***
Only M self-employed			0.98	0.73 ***
None in paid work			1.15 ***	0.74 ***
Father's work sector				
State sector (ref.)				
Municipal sector	1.19 ***	1.06 *		
County sector	0.76 ***	0.83 ***		
Private sector	1.22 ***	1.24 ***		
Parent's work sector				
Both public sector (ref.)				
Both private sector			1.38 ***	1.25 ***
F private/M public			1.25 ***	1.25 ***
F public/M private			1.13 ***	1.04
Child's birth order				
First child (ref.)				
Second child	1.57 ***	1.27 ***	1.57 ***	1.27 ***
≥Third child	2.10 ***	1.44 ***	2.02 ***	1.39 ***
Children from previous relations				
No child from previous relation (ref.)				
Mother yes/Father no	1.01	1.01	0.93 **	0.93 **
Mother no/Father yes	1.25 ***	1.14 ***	1.21 ***	1.10 ***
Both have child from previous relation	1.14 ***	1.07	1.06	0.98
Use of "daddy-days"				
Used "daddy-days" (ref.)				
Did not use "daddy-days"	2.58 ***	1.08 ***	2.56 ***	1.09 ***

<i>cont.</i>				
Child's age when father becomes legal guardian				
At birth (ref.)				
During 1–3 months	1.16 ***	1.13 ***	1.16 ***	1.10 ***
During 4–12 months	1.55 ***	1.24 ***	1.50 ***	1.19 ***
During 2nd year	9.59 ***	4.41 ***	9.57 ***	4.35 ***
Not during first 2 years	34.27 ***	3.06 ***	34.10 ***	2.93 ***
Child's age when father and child first live together				
0–2 months (ref.)				
3–7 months	1.10 *	1.06	1.05	1.05
8–12 months	1.16 *	1.04	1.13 *	1.01
13–24 months	1.40 ***	1.04	1.36 ***	1.02
Not the first 2 years	1.17 ***	0.96	1.17 ***	0.96
Father separates from child				
Live with the child at age 2 (ref.)				
Does not live with the child at age 2	1.60 ***	1.19 ***	1.54 ***	1.14 ***
Father emigrates				
No emigration during the first 2 yrs. (ref.)				
When the child is 1–12 months	2.83 ***	1.31 *	2.92 ***	1.43 **
When the child is 13–24 months	0.95	0.49 ***	0.98	0.54 ***
Father's age at child's birth				
≤25 years	0.99	1.26 ***	0.93 **	1.17 ***
26–30 years	0.99	1.15 ***	0.96 **	1.10 ***
31–35 years (ref.)				
36–40 years	1.05 **	0.96 **	1.06 ***	0.97
41–45 years	1.18 ***	1.00	1.18 ***	1.02
>45 years	1.37 ***	0.98	1.32 ***	0.99
Father origin and age at immigration				
Native-born (ref.)				
Foreign-born/<15 years	1.98 ***	1.45 ***		
Foreign-born/15–20 years	2.31 ***	1.41 ***		
Foreign-born/>20 years	2.47 ***	1.61 ***		
Parents' origin				
Both native-born (ref.)				
Both foreign-born			2.55 ***	1.65 ***
F foreign-/M native-born			1.64 ***	1.37 ***
F native-/M foreign-born			1.28 ***	1.03
Father immigrates after child's birth				
Did not immigrate 6 months after birth(a)				
Immigrates 6 months after birth	1.11	1.21	1.07	1.42 **
Father's place of residence				
Metropolitan areas				
Larger municipalities (ref.)	1.04 ***	1.28 ***	1.04 **	1.26 ***
Smaller municipalities	1.09 ***	1.45 ***	1.08 ***	1.42 ***
Child's birth year				
2015	1.33 ***	1.16 ***	1.33 ***	1.16 ***
2016	1.02	0.98 *	1.02	0.98
2017 (ref.)				
Constant	0.02 ***	0.06 ***	0.02 ***	0.05 ***
N	324,485		324,485	
LR chi2 (M1:100; M2: 106)	82,888.6 ***		87,069.8 ***	
Pseudo R2	0.145		0.152	

Note: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$. Categories with unknown value are included in the analysis but omitted from the table. F=father, M=mother. (a) At the earliest 6 months after the child's birth. Place of residence refers to metropolitan areas and nearby municipalities, Larger municipalities and nearby municipalities, smaller municipalities. Source: Authors' calculations based on register data

Table A 6. Father's income (quintiles). Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Quintile 1	56.6	31.2	36.1	37.1	37.2	37.7	36.3	36.0	32.4	32.7	32.8	32.4	32.2	33.0	33.8	34.1	33.0	32.2	31.6	30.0	27.0	25.1	21.9	21.1
Quintile 2	54.3	24.7	29.2	31.3	31.1	29.8	30.6	30.7	25.1	25.4	26.7	26.0	25.8	26.8	27.5	26.5	26.9	26.0	24.9	24.1	22.0	20.9	18.0	17.5
Quintile 3	48.8	19.3	23.3	25.8	26.7	26.8	28.0	27.5	21.3	22.0	22.2	22.1	21.9	22.7	23.5	23.4	23.1	22.1	21.6	20.3	18.3	16.3	14.2	13.8
Quintile 4	47.3	18.5	22.3	26.4	27.3	28.7	28.9	28.3	22.4	22.4	23.3	23.0	22.1	23.0	24.0	23.1	23.3	22.4	22.6	20.8	18.1	16.5	14.0	13.9
Quintile 5	50.9	23.9	28.4	32.3	34.7	36.0	34.7	34.0	29.1	28.5	28.9	27.5	27.2	27.9	27.5	26.6	26.3	26.1	26.5	23.9	22.2	20.9	18.0	18.2
Unadjusted proportions (%)																								
Quintile 1	69.5	44.1	50.5	52.7	52.0	53.6	51.9	50.1	45.4	45.3	45.6	45.8	46.0	46.6	47.9	49.8	49.2	47.3	46.7	45.4	42.3	39.8	35.7	35.2
Quintile 2	56.2	25.0	28.9	31.8	33.6	30.1	29.4	29.0	22.8	22.9	24.0	23.8	23.8	24.2	24.6	23.8	25.5	24.3	22.5	22.3	20.5	19.7	17.2	16.3
Quintile 3	43.9	14.8	18.2	20.4	21.5	21.2	22.1	21.8	16.5	16.7	16.7	16.7	16.7	16.9	17.8	17.9	17.3	16.4	16.0	15.0	13.3	11.6	10.1	9.9
Quintile 4	41.7	13.7	17.0	20.5	21.6	22.9	23.1	22.5	17.3	16.8	17.4	17.4	16.7	17.3	18.0	17.4	17.4	16.6	16.8	15.3	12.9	11.5	9.8	9.8
Quintile 5	46.0	18.8	23.2	27.3	29.9	31.3	30.1	29.1	23.8	22.9	22.8	21.9	21.4	21.8	21.5	20.7	20.4	20.3	20.8	18.4	16.8	15.6	13.5	13.7
Total number	53,672	24,572	26,389	26,943	27,383	27,228	27,339	26,681	23,202	24,003	25,153	25,161	25,900	26,966	28,183	28,819	29,595	27,845	27,831	26,380	24,529	22,727	20,492	19,730
<i>1–29 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Quintile 1	16.6	25.0	24.7	25.7	24.3	23.4	22.7	22.1	16.5	16.5	16.2	17.1	17.1	15.8	13.6	14.2	14.9	15.1	16.8	15.7	15.8	16.1	16.4	16.6
Quintile 2	18.0	29.0	29.0	30.1	29.5	27.9	29.1	27.2	20.4	19.5	19.2	19.8	19.4	18.2	17.7	17.4	17.3	17.6	20.3	18.4	17.2	16.2	14.8	15.6
Quintile 3	19.7	30.3	31.6	33.8	32.5	32.5	31.4	29.6	21.4	20.5	20.4	20.0	20.7	19.8	19.3	19.4	19.1	18.7	22.8	19.3	17.6	17.7	15.1	15.8
Quintile 4	19.6	31.5	33.7	34.7	33.4	33.0	31.0	28.8	22.2	21.3	20.3	19.4	19.6	19.4	18.5	18.8	18.2	18.6	21.6	18.5	17.8	17.5	15.4	15.7
Quintile 5	17.9	33.1	33.9	33.1	32.6	30.2	28.5	26.7	21.3	19.7	18.8	18.3	17.2	17.0	16.1	15.7	15.9	15.8	19.3	16.9	15.3	15.6	14.6	14.6
Unadjusted proportions (%)																								
Quintile 1	12.2	20.9	19.5	19.8	19.6	17.7	17.6	17.5	13.5	13.3	12.9	13.4	13.3	12.4	10.6	10.8	11.2	11.7	13.1	12.2	12.5	13	13.5	13.7
Quintile 2	18.4	30.8	30.9	31.8	30.4	29.8	31.6	29.9	22.8	21.7	21.1	21.3	20.7	19.6	19	18.7	18.4	18.6	21.6	19.5	18.2	17	15.4	16.3
Quintile 3	23.6	34.7	36.3	39	37.8	38.5	36.5	34.5	24.9	23.6	23.4	22.6	23.2	22.2	21.8	21.7	21.3	20.6	25	21.1	19.2	19.2	16.1	16.8
Quintile 4	23.1	35.4	38.2	39.4	38	37.9	35.3	32.6	24.7	23.3	22.2	21	21.1	20.9	20.1	20.2	19.4	19.8	23.2	19.6	18.9	18.5	16.1	16.4
Quintile 5	18.6	33.3	34.5	33.6	33	30.2	28.3	26.1	20.1	18.5	17.7	17.2	16	16	15	14.5	14.6	14.6	18.1	15.7	14.2	14.5	13.5	13.5
Total number	18,448	27,485	26,219	26,001	25,353	24,576	24,721	23,215	18,448	18,081	18,092	17,857	18,300	17,934	17,255	17,463	17,612	17,355	20,753	18,184	17,441	17,322	16,111	16,202

cont.

<i>≥30 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Quintile 1	26.8	43.8	39.2	37.1	38.5	40.4	40.8	41.7	51.0	50.8	50.9	50.4	50.7	51.1	52.5	51.6	52.0	52.6	51.5	54.2	57.1	58.6	61.6	62.2
Quintile 2	27.7	46.3	41.7	38.5	39.4	45.3	40.2	42.0	54.5	55.1	54.0	54.2	54.8	54.9	54.8	56.1	55.7	56.3	54.7	57.4	60.7	62.8	67.1	66.9
Quintile 3	31.4	50.4	45.0	40.4	40.7	42.4	40.6	42.9	57.3	57.5	57.4	57.8	57.3	57.4	57.1	57.1	57.7	59.2	55.6	60.3	64.0	66.0	70.6	70.3
Quintile 4	33.0	50.0	43.9	38.8	39.3	39.2	40.0	42.9	55.4	56.2	56.3	57.6	58.3	57.5	57.4	58.0	58.5	59.0	55.7	60.7	64.1	65.9	70.6	70.4
Quintile 5	31.1	43.0	37.7	34.5	32.6	34.2	36.8	39.2	49.6	51.7	52.3	54.1	55.6	55.0	56.3	57.7	57.8	58.1	54.1	59.1	62.4	63.4	67.4	67.2
Unadjusted proportions (%)																								
Quintile 1	18.3	35.0	30.0	27.5	28.4	28.7	30.5	32.3	41.1	41.4	41.5	40.8	40.7	41.0	41.5	39.4	39.5	40.9	40.2	42.4	45.3	47.2	50.8	51.0
Quintile 2	25.3	44.2	40.2	36.4	36.1	40.1	39.0	41.2	54.5	55.4	54.9	54.8	55.5	56.3	56.4	57.5	56.1	57.1	55.9	58.2	61.4	63.4	67.4	67.4
Quintile 3	32.5	50.6	45.5	40.7	40.8	40.4	41.3	43.7	58.6	59.7	60.0	60.7	60.1	60.9	60.4	60.5	61.4	62.9	59.0	63.9	67.5	69.2	73.7	73.3
Quintile 4	35.2	51.0	44.8	40.0	40.4	39.2	41.6	44.8	58.0	59.9	60.5	61.5	62.1	61.8	61.9	62.4	63.3	63.6	59.9	65.1	68.2	70.0	74.1	73.8
Quintile 5	35.4	47.9	42.3	39.1	37.0	38.5	41.6	44.8	56.2	58.6	59.5	61.0	62.6	62.3	63.4	64.8	65.0	65.1	61.1	65.9	69.0	69.9	72.9	72.8
Total number	100,787	93,322	86,570	82,718	82,177	81,788	84,179	84,085	88,416	91,637	94,723	95,247	98,799	100,542	102,034	104,126	106,473	104,084	105,323	105,472	107,380	107,435	109,706	107,344

Source: Authors' calculations based on register data.

Table A 7. Mother's share of both parents' income. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
<45 percent	52.7	24.7	29.1	32.6	34.3	35.2	34.5	34.0	28.5	29.0	29.8	29.4	28.9	30.0	30.5	29.7	29.6	28.9	28.4	27.0	24.5	23.0	20.2	20.0
45–55 percent	50.9	22.4	26.7	28.2	28.8	27.6	28.3	28.1	23.3	23.2	23.3	22.5	22.4	22.3	23.3	22.9	22.5	22.6	21.9	20.5	18.9	17.6	14.9	14.7
>55 percent	51.7	24.1	28.2	29.6	29.6	30.5	29.7	29.5	25.7	25.3	25.6	24.8	24.5	25.5	25.7	25.8	25.4	23.9	24.4	22.7	20.5	18.8	16.2	15.6
Unadjusted proportions (%)																								
<45 percent	47.9	18.8	23.1	27.1	30.8	29.2	31.4	30.6	24.6	24.6	25.3	25.3	25.0	25.7	26.3	25.9	26.1	25.1	24.6	23.5	21.1	19.6	17.3	17.4
45–55 percent	43.1	15.6	19.5	20.9	23.2	24.8	23.4	22.8	18.4	17.7	17.4	16.9	16.7	16.2	16.9	16.8	16.3	16.2	15.6	14.4	13.2	12.2	10.0	10.0
>55 percent	63.1	31.2	37.1	40.3	42.4	46.6	43.8	42.8	37.6	37.1	37.3	36.4	36.1	36.8	37.3	38.8	38.2	35.4	36.0	34.0	31.5	28.9	25.3	24.9
Total number	53,672	24,572	26,389	26,943	27,383	27,228	27,339	26,681	23,202	24,003	25,153	25,161	25,900	26,966	28,183	28,819	29,595	27,845	27,831	26,380	24,529	22,727	20,492	19,730

cont.

<i>1–29 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
<45 percent	18.0	30.5	31.6	32.7	31.7	31.0	29.4	27.6	21.7	20.8	20.1	19.8	19.9	19.4	18.5	18.5	18.3	18.4	21.4	19.0	17.6	17.6	16.1	16.6
45–55 percent	18.8	28.4	29.0	29.9	29.8	28.0	28.9	26.8	18.2	17.2	17.2	17.2	16.6	15.6	15.0	14.9	14.9	14.8	18.7	15.6	14.6	14.0	12.3	12.6
>55 percent	20.3	28.7	29.5	30.2	29.0	27.0	25.8	25.0	18.2	17.9	17.2	17.7	17.8	16.2	14.5	14.8	15.6	15.5	17.7	15.9	15.7	15.7	14.9	15.4
Unadjusted proportions (%)																								
<45 percent	20.7	34.2	35.7	36.6	34.5	34.6	31.9	29.9	23.6	22.5	21.7	21.2	21.1	20.8	19.9	19.8	19.3	19.5	22.7	20.1	18.7	18.7	17.0	17.5
45–55 percent	22.0	31.2	32.0	33.1	32.1	29.9	31.4	29.1	19.6	18.2	18.1	17.9	17.1	16.0	15.4	15.2	15.2	15.1	18.9	15.6	14.6	14.0	12.2	12.4
>55 percent	15.9	26.8	26.2	25.8	24.1	21.1	20.0	19.5	14.4	14.1	13.3	13.6	13.7	12.5	11.2	11.2	12.0	12.2	13.8	12.5	12.5	12.8	12.4	12.8
Total number	18,448	27,485	26,219	26,001	25,353	24,576	24,721	23,215	18,448	18,081	18,092	17,857	18,300	17,934	17,255	17,463	17,612	17,355	20,753	18,184	17,441	17,322	16,111	16,202
<i>≥30 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
<45 percent	29.3	44.9	39.3	34.7	34.0	33.8	36.1	38.4	49.8	50.3	50.1	50.8	51.3	50.6	51.0	51.7	52.1	52.8	50.2	54.1	57.9	59.4	63.7	63.4
45–55 percent	30.3	49.2	44.3	41.8	41.4	44.5	42.8	45.1	58.4	59.6	59.6	60.3	61.0	62.0	61.7	62.2	62.6	62.6	59.4	63.9	66.5	68.3	72.8	72.8
>55 percent	28.0	47.2	42.3	40.2	41.4	42.6	44.5	45.5	56.1	56.8	57.2	57.5	57.8	58.3	59.7	59.3	59.0	60.5	57.9	61.4	63.8	65.5	68.9	69.0
Unadjusted proportions (%)																								
<45 percent	31.4	46.9	41.2	36.3	34.7	36.2	36.7	39.5	51.8	52.9	53.0	53.5	53.9	53.5	53.8	54.3	54.6	55.4	52.7	56.4	60.2	61.7	65.7	65.1
45–55 percent	34.9	53.2	48.6	46.0	44.7	45.2	45.2	48.1	62.0	64.0	64.5	65.2	66.2	67.7	67.7	68.0	68.4	68.7	65.4	70.0	72.2	73.8	77.8	77.6
>55 percent	21.0	42.0	36.8	33.9	33.6	32.3	36.2	37.7	48.0	48.9	49.4	49.9	50.3	50.6	51.5	50.0	49.8	52.5	50.2	53.4	56.0	58.3	62.4	62.3
Total number	28,667	41,265	33,962	29,774	29,441	29,984	32,119	34,189	46,766	49,553	51,478	52,229	54,599	55,642	56,596	57,844	59,266	58,884	56,739	60,908	65,410	67,386	73,103	71,412

Source: Authors' calculations based on register data.

Table A 8. Father's education. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Primary level	56	26	29.4	31.1	32.6	32.4	33	33.6	28.8	29.8	30.9	30.5	30.4	32	32	31.5	31.7	31.1	30.8	29.3	27	25.2	22.1	21.6
Secondary level	52.2	23.9	28.3	31	32.4	33.2	33.7	33.2	27.8	27.9	28.7	28.6	28.3	29.2	30.5	30.3	29.7	28.9	28.1	26.8	24.5	22.7	19.6	19.7
Tertiary level	48.1	23.4	27.5	30.6	31.9	31.9	31.1	30.4	25.8	25.5	25.7	24.3	23.8	24.3	24.2	23.3	23.5	22.7	23.3	21.5	19.3	18.1	16.1	15.5
Unadjusted proportions (%)																								
Primary level	62.6	34.1	38.9	40.3	42.1	41.4	41.2	41.8	35.7	37.9	39.2	39.8	40.1	41.7	42.7	43.2	44.3	43.0	42.2	41.7	38.6	37.1	32.9	32.6
Secondary level	50.8	22.9	27.4	29.5	30.6	30.7	30.2	29.9	24.3	24.1	24.8	25.0	24.8	25.4	26.9	27.1	26.9	25.6	24.8	23.4	21.3	19.2	16.3	16.3
Tertiary level	44.2	21.6	26.0	28.9	29.6	29.6	28.3	27.6	22.6	22.1	22.0	20.8	20.2	20.1	20.4	20.0	20.3	19.5	19.9	18.2	16.1	14.8	13.3	12.8
Total number	53,672	24,572	26,389	26,943	27,383	27,228	27,339	26,681	23,202	24,003	25,153	25,161	25,900	26,966	28,183	28,819	29,595	27,845	27,831	26,380	24,529	22,727	20,492	19,730
<i>1–29 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Primary level	17.9	28.3	30.2	31.1	28.9	30.5	28.9	26.9	20.2	18.9	19.2	19.3	19.9	18.7	17.5	18.1	18	18.2	19.9	19.2	18.3	17.3	16	17.1
Secondary level	19.4	31.1	31.9	33.4	32.4	31.6	31.1	29.5	22.2	21.7	21.1	21.1	21.2	20.6	19.7	19.8	19.8	19.9	22.7	20.3	19	19	16.9	17.4
Tertiary level	18	29.5	30.2	30.1	29.1	26.5	25.3	23.4	17.7	16.3	15.7	15.3	14.7	14.1	13.2	13	12.8	12.8	16.5	13.4	12.5	12.4	11.6	11.7
Unadjusted proportions (%)																								
Primary level	16.0	25.9	26.8	27.8	25.9	27.3	26.5	24.8	19.2	17.5	17.7	17.5	18.0	16.9	15.6	15.8	15.4	15.8	17.5	16.7	16.3	15.5	14.7	15.8
Secondary level	20.8	32.5	33.4	35.3	34.8	34.2	34.0	32.2	24.3	23.8	23.1	22.9	23.0	22.5	21.6	21.6	21.5	21.7	24.8	22.2	20.8	20.9	18.5	19.0
Tertiary level	18.2	28.5	29.1	29.2	28.7	26.3	24.9	23.0	17.2	15.7	15.1	14.6	14.0	13.5	12.6	12.3	12.1	12.0	15.7	12.7	11.8	11.7	10.9	11.0
Total number	18,448	27,485	26,219	26,001	25,353	24,576	24,721	23,215	18,448	18,081	18,092	17,857	18,300	17,934	17,255	17,463	17,612	17,355	20,753	18,184	17,441	17,322	16,111	16,202

cont.

≥ 30 days	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Primary level	26.1	45.8	40.3	37.7	38.5	37.2	38	39.5	51	51.3	49.9	50.1	49.7	49.3	50.5	50.4	50.3	50.8	49.3	51.5	54.7	57.5	61.9	61.3
Secondary level	28.4	44.9	39.8	35.6	35.2	35.2	35.2	37.3	50	50.4	50.2	50.3	50.5	50.3	49.8	49.9	50.4	51.2	49.1	52.9	56.5	58.2	63.4	63
Tertiary level	34	47	42.4	39.3	39	41.6	43.7	46.2	56.5	58.2	58.6	60.4	61.5	61.6	62.6	63.7	63.7	64.5	60.3	65	68.2	69.5	72.2	72.7
Unadjusted proportions (%)																								
Primary level	21.5	40.0	34.3	31.9	32.0	31.3	32.3	33.4	45.1	44.5	43.1	42.7	41.9	41.4	41.7	41.0	40.3	41.2	40.3	41.7	45.1	47.5	52.3	51.6
Secondary level	28.5	44.5	39.2	35.3	34.6	35.1	35.8	37.9	51.4	52.1	52.1	52.1	52.1	52.2	51.5	51.3	51.6	52.7	50.3	54.3	58.0	59.9	65.2	64.7
Tertiary level	37.6	49.9	44.9	41.9	41.7	44.1	46.9	49.4	60.3	62.2	63.0	64.6	65.8	66.5	67.0	67.7	67.5	68.5	64.4	69.1	72.1	73.5	75.8	76.2
Total number	28, 667	41, 265	33, 962	29, 774	29, 441	29, 984	32, 119	34, 189	46, 766	49, 553	51, 478	52, 229	54, 599	55, 642	56, 596	57, 844	59, 266	58, 884	56, 739	60, 908	65, 410	67, 386	73, 103	71, 412

Source: Authors' calculations based on register data.

Table A 9. Father's employment status. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

0 days	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Employed	50.2	22.6	26.7	29.6	30.7	31.2	31.1	30.3	25.0	25.1	25.6	25.1	24.5	25.4	26.0	25.4	25.4	24.8	24.6	22.8	20.7	19.3	16.7	16.7
Self-employed	69.8	30.3	35.5	39.3	41.4	42.0	43.5	43.1	38.4	37.5	40.0	39.3	38.8	40.0	40.6	39.2	38.8	35.8	35.4	35.6	32.2	29.8	26.1	24.8
Not in paid work	50.7	26.2	30.3	31.9	34.6	33.7	34.5	36.1	32.2	32.8	32.9	31.8	32.1	32.9	33.9	34.2	32.9	32.4	32.7	31.0	28.2	26.1	23.2	22.1
Unadjusted proportions (%)																								
Employed	45.4	17.5	21.6	24.1	24.9	25.8	25.5	25.0	19.8	19.4	19.5	19.2	18.7	19.3	20.1	19.8	19.3	18.9	18.8	17.4	15.5	14.2	12.2	12.3
Self-employed	77.0	37.5	43.9	48.3	47.7	47.8	50.0	49.7	44.8	41.8	44.7	42.4	41.6	42.6	43.4	42.0	41.7	38.2	37.2	37.3	33.6	30.4	26.5	25.0
Not in paid work	69.8	50.8	58.3	57.8	58.3	57.7	57.2	59.1	53.4	53.7	53.9	53.1	53.7	56.6	60.1	62.5	57.8	57.8	59.4	57.2	53.7	50.6	46.8	45.9
Total number	53, 672	24, 572	26, 389	26, 943	27, 383	27, 228	27, 339	26, 681	23, 202	24, 003	25, 153	25, 161	25, 900	26, 966	28, 183	28, 819	29, 595	27, 845	27, 831	26, 380	24, 529	22, 727	20, 492	19, 730

cont.

1–29 days	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Employed	18.6	30.2	31.4	32.4	31.9	30.4	29.6	27.7	20.8	19.8	19.2	18.8	18.7	18.2	17.4	17.4	17.0	17.1	20.4	17.8	16.5	16.2	14.6	14.9
Self-employed	8.5	21.2	20.1	21.2	20.8	21.6	21.7	21.0	17.0	16.6	16.1	18.0	17.9	17.2	16.7	16.1	16.6	16.6	18.6	16.9	16.1	16.7	15.2	16.6
Not in paid work	20.8	29.7	29.4	30.1	26.6	27.5	25.4	24.0	18.6	18.9	18.5	19.6	19.8	17.0	14.4	15.4	18.0	17.3	18.9	17.8	18.5	19.2	19.3	19.5
Unadjusted proportions (%)																								
Employed	21.5	33.8	35.1	36.4	36.0	34.4	33.2	30.8	22.9	21.7	21.1	20.4	20.2	19.6	18.7	18.6	18.2	18.3	21.8	18.9	17.5	17.1	15.3	15.6
Self-employed	7.1	20.5	18.8	19.3	20.2	20.9	20.4	19.8	16.3	16.0	15.2	17.4	17.4	16.7	16.2	15.6	16.0	16.2	18.2	16.6	15.8	16.5	15.2	16.8
Not in paid work	12.0	17.8	15.7	17.0	15.9	16.1	15.5	14.1	11.5	11.4	10.9	11.6	11.6	9.3	7.3	7.4	10.0	9.4	9.8	9.6	10.3	11.2	11.7	11.8
Total number	18,448	27,485	26,219	26,001	25,353	24,576	24,721	23,215	18,448	18,081	18,092	17,857	18,300	17,934	17,255	17,463	17,612	17,355	20,753	18,184	17,441	17,322	16,111	16,202
≥30 days	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Employed	31.2	47.2	41.9	38.0	37.5	38.4	39.3	41.9	54.2	55.2	55.1	56.1	56.7	56.4	56.6	57.2	57.6	58.0	55.0	59.4	62.8	64.5	68.7	68.5
Self-employed	21.6	48.5	44.3	39.6	37.8	36.4	34.9	35.9	44.6	45.9	43.9	42.7	43.3	42.9	42.8	44.7	44.7	47.5	46.0	47.5	51.8	53.5	58.7	58.5
Not in paid work	28.6	44.1	40.2	38.0	38.9	38.8	40.1	39.9	49.2	48.3	48.6	48.6	48.1	50.2	51.7	50.4	49.1	50.3	48.4	51.3	53.3	54.7	57.4	58.4
Unadjusted proportions (%)																								
Employed	33.2	48.7	43.3	39.5	39.1	39.8	41.4	44.1	57.3	58.9	59.4	60.4	61.1	61.1	61.2	61.6	62.5	62.8	59.4	63.8	67.0	68.6	72.5	72.1
Self-employed	15.9	42.0	37.3	32.5	32.1	31.2	29.6	30.5	39.0	42.2	40.1	40.1	41.0	40.7	40.3	42.4	42.2	45.6	44.6	46.1	50.6	53.1	58.2	58.2
Not in paid work	18.2	31.4	26.0	25.2	25.8	26.2	27.2	26.9	35.1	34.9	35.2	35.2	34.6	34.1	32.6	30.1	32.2	32.8	30.8	33.3	36.0	38.2	41.5	42.3
Total number	28,667	41,265	33,962	29,774	29,441	29,984	32,119	34,189	46,766	49,553	51,478	52,229	54,599	55,642	56,596	57,844	59,266	58,884	56,739	60,908	65,410	67,386	73,103	71,412

Source: Authors' calculations based on register data.

Table A 10. Father's work sector. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave.
Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
State sector	47.5	24.8	29.7	31.8	32.0	32.4	31.6	31.0	26.7	25.3	26.0	25.4	25.5	25.3	25.8	24.8	25.0	23.9	24.6	22.6	20.3	18.3	17.2	17.2
Municipal sector	47.6	24.9	28.2	30.0	30.6	31.1	30.3	30.3	25.3	26.0	26.6	25.8	24.6	26.6	26.9	25.9	25.6	26.6	25.5	24.7	22.3	21.4	18.9	19.0
County sector	46.1	22.8	27.4	28.0	29.2	28.9	27.8	28.7	24.6	23.1	25.3	21.4	21.7	23.6	24.1	22.5	23.6	21.1	21.9	20.5	17.4	15.2	15.2	14.5
Private sector	53.0	24.0	28.2	31.1	32.2	32.9	33.1	32.5	27.3	27.5	28.1	27.7	27.2	28.1	28.8	28.3	28.0	27.2	26.8	25.3	23.1	21.6	18.8	18.5
Unadjusted proportions (%)																								
State sector	42.2	18.9	23.8	25.6	25.5	26.3	24.8	24.5	19.9	17.9	18.2	17.5	17.3	16.8	16.7	16.0	16.1	15.0	15.9	14.4	12.2	10.7	10.1	10.1
Municipal sector	48.2	25.1	29.2	30.2	30.1	29.7	27.0	25.7	20.4	21.2	21.0	19.7	18.6	20.5	20.8	19.7	19.9	20.9	20.2	19.4	17.7	16.3	15.1	15.4
County sector	42.2	17.9	22.6	22.5	22.8	22.9	20.8	22.1	18.4	16.1	17.6	14.5	14.3	15.5	15.4	14.7	15.7	13.2	13.6	12.3	10.0	8.2	8.4	7.6
Private sector	51.2	20.7	24.9	27.7	29.2	29.7	29.5	29.0	23.5	23.3	23.7	23.7	23.3	23.7	24.8	24.7	24.3	23.2	22.9	21.5	19.2	17.6	15.1	14.9
Total number	53, 672	24, 572	26, 389	26, 943	27, 383	27, 228	27, 339	26, 681	23, 202	24, 003	25, 153	25, 161	25, 900	26, 966	28, 183	28, 819	29, 595	27, 845	27, 831	26, 380	24, 529	22, 727	20, 492	19, 730
<i>1–29 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
State sector	18.5	29.3	28.9	29.9	28.5	26.3	25.4	23.4	16.9	16.7	15.9	16.2	15.5	14.5	13.9	12.7	13.8	13.5	17.7	15.4	13.9	14.6	12.2	13.0
Municipal sector	18.4	27.6	28.5	29.1	27.6	27.1	27.5	25.6	18.4	17.4	17.5	17.4	16.7	16.3	16.0	15.4	14.4	15.6	18.7	15.9	15.5	14.6	13.6	13.9
County sector	17.4	25.7	28.1	27.5	27.3	26.7	26.7	21.6	16.8	15.3	14.4	15.4	14.7	15.6	13.3	13.1	12.2	12.2	15.0	12.9	12.2	12.8	11.4	10.8
Private sector	18.1	29.9	31.2	32.4	31.8	30.5	29.6	27.9	21.2	20.3	19.7	19.4	19.5	18.8	17.9	18.0	17.9	17.8	20.9	18.4	17.2	17.0	15.4	15.7
Unadjusted proportions (%)																								
State sector	20.2	30.7	30.2	31.2	29.8	27.1	25.7	23.4	16.6	15.9	15.1	15.2	14.5	13.5	13.0	11.8	12.8	12.5	16.6	14.1	12.6	13.3	11.0	11.7
Municipal sector	18.2	27.2	27.6	28.4	27.5	27.2	27.8	26.0	18.4	17.1	17.3	17.1	16.1	15.9	15.5	14.8	13.8	15.1	18.0	15.3	14.9	14.1	13.1	13.5
County sector	18.1	26.0	28.1	27.5	27.5	26.5	26.5	20.9	15.7	14.2	13.3	13.8	13.3	14.1	11.9	11.6	10.8	10.7	13.2	11.1	10.4	10.9	9.7	9.1
Private sector	20.2	33.1	34.3	35.7	35.0	33.7	32.5	30.4	23.0	21.9	21.3	20.7	20.7	19.9	18.9	18.9	18.7	18.8	22.0	19.3	18.0	17.8	16.0	16.4
Total number	18, 448	27, 485	26, 219	26, 001	25, 353	24, 576	24, 721	23, 215	18, 448	18, 081	18, 092	17, 857	18, 300	17, 934	17, 255	17, 463	17, 612	17, 355	20, 753	18, 184	17, 441	17, 322	16, 111	16, 202

cont.

<i>≥30 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
State sector	34.0	45.9	41.4	38.4	39.4	41.3	43.1	45.7	56.4	58.1	58.1	58.4	59.0	60.2	60.3	62.5	61.2	62.5	57.6	62.0	65.8	67.2	70.5	69.8
Municipal sector	33.9	47.6	43.3	40.9	41.8	41.7	42.2	44.1	56.3	56.7	55.9	56.8	58.7	57.0	57.2	58.8	60.1	57.8	55.8	59.4	62.2	64.0	67.5	67.1
County sector	36.5	51.6	44.5	44.6	43.5	44.4	45.5	49.8	58.6	61.5	60.2	63.2	63.5	60.8	62.6	64.5	64.2	66.7	63.1	66.6	70.4	72.0	73.4	74.7
Private sector	28.9	46.1	40.6	36.5	35.9	36.6	37.3	39.6	51.5	52.3	52.2	52.8	53.3	53.2	53.4	53.7	54.2	55.0	52.3	56.3	59.8	61.5	65.9	65.8
Unadjusted proportions (%)																								
State sector	37.6	50.4	45.9	43.2	44.7	46.6	49.5	52.1	63.5	66.2	66.7	67.3	68.2	69.7	70.3	72.1	71.2	72.5	67.5	71.5	75.2	76.0	78.8	78.2
Municipal sector	33.6	47.6	43.2	41.4	42.4	43.1	45.2	48.3	61.2	61.7	61.7	63.2	65.3	63.6	63.7	65.5	66.3	64.0	61.8	65.3	67.4	69.6	71.8	71.1
County sector	39.7	56.1	49.3	50.0	49.7	50.6	52.7	57.0	65.9	69.7	69.1	71.7	72.5	70.5	72.7	73.6	73.5	76.1	73.2	76.6	79.6	80.9	82.0	83.3
Private sector	28.6	46.2	40.8	36.7	35.8	36.6	38.0	40.6	53.4	54.8	55.0	55.6	56.0	56.3	56.3	56.4	56.9	58.1	55.1	59.2	62.8	64.6	68.9	68.7
Total number	28,667	41,265	33,962	29,774	29,441	29,984	32,119	34,189	46,766	49,553	51,478	52,229	54,599	55,642	56,596	57,844	59,266	58,884	56,739	60,908	65,410	67,386	73,103	71,412

Source: Authors' calculations based on register data.

Table A 11. Child's birth order. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
First child	46.2	24.1	27.8	29.2	28.9	28.3	27.7	27.3	23.1	23.5	23.6	22.8	22.6	23.5	24.2	24.0	23.6	23.2	22.9	21.4	19.3	18.4	16.1	15.9
Second child	55.0	24.2	28.5	32.7	35.6	37.3	38.2	37.5	31.0	30.8	31.6	31.3	30.6	31.1	31.9	30.8	31.1	29.9	29.3	27.7	25.2	23.3	20.3	20.0
≥Third child	57.4	25.0	28.8	31.6	34.0	34.3	35.9	36.0	32.2	32.2	33.8	33.4	33.7	35.0	34.5	34.5	33.7	33.1	33.6	32.1	30.4	27.8	24.5	23.6
Unadjusted proportions (%)																								
First child	48.4	26.2	30.2	30.7	30.2	29.4	27.7	27.0	22.1	22.4	22.5	22.3	22.2	23.1	23.9	24.4	24.3	23.4	23.1	21.4	18.8	17.5	15.2	15.0
Second child	55.6	24.5	28.7	32.6	34.8	36.0	36.3	35.5	28.8	28.1	28.4	28.3	27.7	27.9	29.0	28.2	28.6	27.3	26.7	25.3	23.0	20.9	18.2	17.9
≥Third child	60.6	30.5	35.4	38.4	39.9	40.1	40.3	40.2	36.2	36.2	37.5	37.8	37.7	38.1	38.3	39.1	38.4	37.6	37.8	36.8	35.7	33.4	30.3	29.6
Total number	53,672	24,572	26,389	26,943	27,383	27,228	27,339	26,681	23,202	24,003	25,153	25,161	25,900	26,966	28,183	28,819	29,595	27,845	27,831	26,380	24,529	22,727	20,492	19,730

cont.

1–29 days	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
First child	19.9	30.5	31.2	32.1	31.8	30.3	29.3	27.1	19.7	18.7	18.1	17.8	17.8	16.8	16.0	16.2	16.3	16.1	19.3	16.9	15.8	15.4	14.0	14.1
Second child	17.4	29.1	30.0	31.3	29.8	28.8	28.0	26.7	21.2	20.4	19.7	19.7	19.4	18.9	17.7	17.8	17.3	17.7	20.7	18.2	17.2	17.0	15.6	16.2
≥Third child	16.8	28.4	29.7	30.2	27.6	28.2	27.2	26.3	19.3	19.1	19.4	19.9	19.5	19.3	19.1	18.1	18.5	18.1	20.8	18.3	17.5	18.3	16.8	17.3
Unadjusted proportions (%)																								
First child	19.6	30.2	30.9	32.1	32.1	31.0	30.1	27.8	20.4	18.9	18.2	17.7	17.6	16.6	15.9	15.9	15.9	15.8	19.0	16.6	15.6	15.3	13.8	14.0
Second child	18.0	29.9	30.9	32.2	31.4	30.4	29.8	28.4	22.6	21.5	20.7	20.4	19.9	19.5	18.2	18.1	17.4	17.9	20.9	18.3	17.2	17.1	15.6	16.2
≥Third child	15.8	26.3	27.0	27.3	25.6	26.1	25.7	24.9	18.5	18.2	18.3	18.5	18.2	18.2	17.6	16.4	16.6	16.4	19.1	16.7	15.9	16.7	15.3	15.9
Total number	18,448	27,485	26,219	26,001	25,353	24,576	24,721	23,215	18,448	18,081	18,092	17,857	18,300	17,934	17,255	17,463	17,612	17,355	20,753	18,184	17,441	17,322	16,111	16,202
≥30 days	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
First child	33.9	45.5	41.0	38.8	39.3	41.4	43.0	45.6	57.2	57.8	58.3	59.4	59.6	59.7	59.9	59.8	60.1	60.7	57.8	61.7	64.9	66.2	69.9	69.9
Second child	27.6	46.7	41.5	36.1	34.6	33.9	33.7	35.8	47.7	48.9	48.7	49.1	50.1	50.0	50.4	51.4	51.6	52.4	50.0	54.1	57.7	59.7	64.1	63.8
≥Third child	25.7	46.6	41.5	38.3	38.4	37.5	36.9	37.8	48.5	48.6	46.8	46.8	46.8	45.7	46.4	47.4	47.9	48.8	45.6	49.7	52.1	53.9	58.8	59.1
Unadjusted proportions (%)																								
First child	32.0	43.5	38.9	37.2	37.8	39.7	42.2	45.2	57.6	58.7	59.3	60.0	60.1	60.3	60.3	59.7	59.8	60.8	57.9	62.0	65.6	67.2	71.0	71.1
Second child	26.4	45.6	40.4	35.1	33.8	33.6	33.9	36.1	48.6	50.4	50.8	51.4	52.4	52.6	52.8	53.7	53.9	54.8	52.4	56.4	59.8	62.0	66.2	65.9
≥Third child	23.6	43.2	37.6	34.3	34.4	33.8	34.0	34.8	45.3	45.6	44.2	43.7	44.1	43.7	44.1	44.5	44.9	46.0	43.0	46.5	48.4	49.9	54.4	54.5
Total number	28,667	41,265	33,962	29,774	29,441	29,984	32,119	34,189	46,766	49,553	51,478	52,229	54,599	55,642	56,596	57,844	59,266	58,884	56,739	60,908	65,410	67,386	73,103	71,412

Source: Authors' calculations based on register data.

Table A 12. Father's origin and the age at the time of immigration. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Native-born	49.7	21.6	25.9	28.6	29.9	29.7	30.7	30.2	24.7	24.8	25.3	24.7	24.2	24.9	25.5	25.0	24.6	23.9	23.7	22.2	19.8	18.3	15.9	15.7
Foreign-born/<15 years	51.5	24.1	29.9	32.1	34.6	34.8	33.8	35.2	29.5	30.9	32.2	30.8	31.4	32.6	34.5	34.1	34.7	33.0	33.1	30.2	29.4	26.9	24.1	23.9
Foreign-born/15–20 years	56.1	28.9	36.2	36.5	38.5	36.5	38.0	37.5	36.9	38.3	36.7	39.9	36.8	41.3	38.8	38.8	36.8	38.0	34.9	34.7	31.7	29.9	27.1	26.5
Foreign-born/>20 years	52.0	33.2	35.4	39.5	40.2	39.0	39.7	39.9	36.4	36.5	37.8	37.1	37.7	38.2	39.0	38.6	38.9	38.3	37.3	35.7	33.3	31.3	27.2	26.3
Unadjusted proportions (%)																								
Native-born	49.6	20.5	24.6	26.8	28.0	28.2	27.6	26.9	21.3	20.9	21.2	20.8	20.3	20.4	21.1	20.8	20.7	19.6	19.3	17.8	15.4	13.8	11.7	11.4
Foreign-born/<15 years	58.8	30.6	38.1	39.4	41.2	41.6	39.6	40.9	33.8	36.1	37.2	35.4	35.9	36.6	38.2	37.9	38.3	35.3	34.6	30.8	29.6	26.2	22.8	22.4
Foreign-born/15–20 years	74.3	49.7	58.9	58.5	57.4	53.5	53.7	50.5	48.7	48.5	46.6	50.7	47.9	50.8	48.1	48.7	47.2	47.3	44.4	44.7	39.9	37.8	33.2	31.7
Foreign-born/>20 years	76.7	62.1	63.7	64.8	62.2	60.2	58.1	57.0	51.8	52.0	53.2	53.0	54.0	53.8	54.6	54.3	54.7	52.9	51.2	49.2	46.1	43.1	38.5	37.1
Total number	53, 672	24, 572	26, 389	26, 943	27, 383	27, 228	27, 339	26, 681	23, 202	24, 003	25, 153	25, 161	25, 900	26, 966	28, 183	28, 819	29, 595	27, 845	27, 831	26, 380	24, 529	22, 727	20, 492	19, 730
<i>1–29 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Native-born	18.9	30.2	31.3	32.6	31.7	29.8	29.6	27.6	20.7	19.7	19.1	19.0	18.6	18.1	17.2	17.2	17.1	17.1	20.4	17.6	16.3	16.0	14.1	14.4
Foreign-born/<15 years	17.5	27.7	27.8	27.6	27.3	25.0	25.5	25.1	17.9	19.3	17.0	16.5	17.8	17.7	17.1	16.5	16.9	18.1	20.6	19.3	18.5	17.8	18.4	18.1
Foreign-born/15–20 years	16.3	22.1	22.7	27.0	22.0	20.9	21.7	21.7	17.1	17.4	19.6	18.8	20.7	18.1	17.7	16.4	17.9	16.1	18.0	17.9	18.2	18.8	16.9	17.0
Foreign-born/>20 years	16.9	25.2	25.8	24.3	21.8	23.7	23.1	23.3	19.9	18.7	18.9	19.5	20.4	18.2	16.7	17.5	17.1	17.3	19.2	18.3	18.4	19.0	19.0	19.5
Unadjusted proportions (%)																								
Native-born	20.1	32.4	33.5	34.9	34.3	33.1	32.2	30.0	22.3	21.1	20.4	20.0	19.6	19.1	18.2	18.1	17.8	17.9	21.4	18.4	17.0	16.6	14.6	14.9
Foreign-born/<15 years	15.6	25.9	25.1	25.3	25.7	24.1	24.1	23.9	17.5	18.4	16.2	15.7	16.9	16.9	16.4	15.7	16.0	17.3	20.1	18.8	18.1	17.6	18.1	17.7
Foreign-born/15–20 years	9.4	14.8	13.9	17.1	15.6	16.2	16.9	18.0	14.7	15.2	17.2	15.9	17.6	15.7	15.4	14.1	15.5	14.2	16.0	15.7	16.9	17.7	16.3	16.7
Foreign-born/>20 years	6.9	11.9	12.1	12.0	12.4	14.4	14.5	15.2	13.5	12.5	12.4	12.8	13.2	11.8	10.8	11.3	11.1	11.5	13.1	12.7	13.0	13.9	14.2	14.8
Total number	18, 448	27, 485	26, 219	26, 001	25, 353	24, 576	24, 721	23, 215	18, 448	18, 081	18, 092	17, 857	18, 300	17, 934	17, 255	17, 463	17, 612	17, 355	20, 753	18, 184	17, 441	17, 322	16, 111	16, 202

cont.

<i>≥30 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Native-born	31.4	48.1	42.8	38.9	38.3	40.5	39.6	42.2	54.6	55.5	55.6	56.4	57.2	57.0	57.2	57.8	58.3	59.0	55.8	60.2	64.0	65.7	70.1	69.9
Foreign-born/<15 years	31.1	48.2	42.3	40.3	38.1	40.2	40.7	39.7	52.6	49.8	50.8	52.7	50.8	49.7	48.4	49.4	48.5	48.9	46.2	50.5	52.1	55.2	57.6	58.0
Foreign-born/15–20 years	27.7	49.0	41.1	36.4	39.5	42.6	40.3	40.9	45.9	44.3	43.7	41.3	42.5	40.6	43.5	44.8	45.3	45.9	47.1	47.4	50.1	51.3	56.0	56.5
Foreign-born/>20 years	31.1	41.6	38.8	36.3	38.0	37.4	37.3	36.8	43.7	44.8	43.3	43.4	41.9	43.6	44.3	44.0	43.9	44.4	43.5	45.9	48.3	49.7	53.8	54.2
Unadjusted proportions (%)																								
Native-born	30.4	47.1	41.8	38.2	37.8	38.7	40.2	43.2	56.4	57.9	58.4	59.2	60.2	60.5	60.7	61.1	61.5	62.5	59.3	63.8	67.6	69.5	73.7	73.6
Foreign-born/<15 years	25.7	43.5	36.8	35.3	33.1	34.3	36.3	35.2	48.7	45.6	46.6	49.0	47.3	46.5	45.4	46.4	45.7	47.4	45.2	50.5	52.3	56.3	59.1	59.9
Foreign-born/15–20 years	16.3	35.5	27.2	24.4	27.1	30.3	29.5	31.5	36.6	36.4	36.2	33.4	34.4	33.4	36.5	37.2	37.3	38.5	39.6	39.6	43.2	44.5	50.5	51.6
Foreign-born/>20 years	16.3	26.1	24.2	23.2	25.4	25.4	27.3	27.7	34.7	35.5	34.4	34.2	32.8	34.3	34.6	34.3	34.3	35.5	35.7	38.1	40.9	43.1	47.3	48.0
Total number	28,667	41,265	33,962	29,774	29,441	29,984	32,119	34,189	46,766	49,553	51,478	52,229	54,599	55,642	56,596	57,844	59,266	58,884	56,739	60,908	65,410	67,386	73,103	71,412

Source: Authors' calculations based on register data.

Table A 13. Father's place of residence. Adjusted and unadjusted proportions of fathers using 0 days, 1–29 days or 30 or more days of parental leave. Fathers to children born during the years 1994–2017

<i>0 days</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Adjusted proportions (%)																								
Metropolitan areas	51.2	24.5	28.2	30.9	32.2	32.4	32.1	31.9	27.5	27.7	27.6	27.3	26.7	27.5	27.4	27.0	26.9	26.3	26.3	24.3	22.8	21.4	19.0	18.6
Larger municipalities	50.1	23.7	27.5	30.1	31.2	31.7	32.0	31.8	26.8	26.9	27.5	26.8	26.8	27.3	28.3	28.0	27.7	27.3	26.7	25.5	23.1	21.5	18.8	18.4
Smaller municipalities	52.3	23.9	28.7	31.4	32.9	33.2	33.9	33.0	27.3	27.4	28.9	28.2	27.8	29.2	30.3	29.6	29.1	28.1	27.6	26.4	23.5	21.9	18.6	18.7
Unadjusted proportions (%)																								
Metropolitan areas	54.3	27.8	32.1	34.9	35.8	35.9	34.6	33.7	28.0	28.3	27.9	27.8	27.3	27.7	27.9	27.5	27.6	26.5	26.3	24.2	22.5	20.6	18.4	17.9
Larger municipalities	51.3	24.9	29.1	30.8	31.4	31.4	30.8	30.2	24.8	24.5	25.1	24.9	24.9	25.4	26.4	26.8	26.9	26.1	25.6	24.5	22.2	20.5	18.0	17.7
Smaller municipalities	53.6	24.5	29.0	31.0	31.9	31.6	31.3	30.0	24.5	24.2	25.6	25.3	25.3	26.4	27.8	27.9	27.8	26.6	26.0	25.3	22.6	21.3	18.7	19.3
Total number	53,672	24,572	26,389	26,943	27,383	27,228	27,339	26,681	23,202	24,003	25,153	25,161	25,900	26,966	28,183	28,819	29,595	27,845	27,831	26,380	24,529	22,727	20,492	19,730

cont.

<i>1–29 days</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
Adjusted proportions (%)																								
Metropolitan areas	17.0	27.3	27.8	28.6	27.5	26.5	25.5	23.9	17.6	16.8	16.5	15.9	15.8	14.9	14.5	14.3	14.4	14.3	17.2	14.9	13.9	14.0	12.8	13.0
Larger municipalities	19.1	30.5	31.5	32.7	31.7	30.5	29.4	27.7	20.8	19.7	19.2	19.4	19.1	18.7	17.3	17.4	17.4	17.4	20.8	18.1	17.3	16.9	15.5	16.4
Smaller municipalities	20.0	32.3	33.6	34.4	33.2	32.5	32.1	30.2	23.4	22.8	22.0	22.1	22.2	21.3	20.4	20.6	20.2	20.4	23.3	20.9	19.4	19.2	17.4	17.3
Unadjusted proportions (%)																								
Metropolitan areas	15.9	25.7	25.9	26.6	25.9	25.0	24.3	22.9	17.0	16.0	15.7	15.0	14.8	14.0	13.6	13.3	13.3	13.4	16.1	14.0	13.1	13.3	12.1	12.3
Larger municipalities	19.1	30.5	31.4	33.0	32.5	31.7	30.7	29.0	21.9	20.6	19.9	19.8	19.4	19.1	17.7	17.7	17.5	17.6	21.0	18.3	17.4	17.0	15.6	16.5
Smaller municipalities	20.6	33.6	35.2	36.3	35.8	35.3	35.2	33.3	25.9	25.1	24.1	24.0	24.1	23.1	22.2	22.1	21.5	21.9	25.0	22.3	20.8	20.4	18.3	18.1
Total number	18,448	27,485	26,219	26,001	25,353	24,576	24,721	23,215	18,448	18,081	18,092	17,857	18,300	17,934	17,255	17,463	17,612	17,355	20,753	18,184	17,441	17,322	16,111	16,202
<i>≥30 days</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
Adjusted proportions (%)																								
Metropolitan areas	31.8	48.2	43.9	40.5	40.3	41.1	42.3	44.2	54.9	55.5	55.9	56.8	57.5	57.6	58.0	58.8	58.7	59.4	56.6	60.7	63.3	64.6	68.2	68.4
Larger municipalities	30.9	45.9	41.0	37.3	37.1	37.7	38.5	40.5	52.4	53.4	53.3	53.8	54.1	54.0	54.4	54.6	54.9	55.3	52.5	56.4	59.7	61.6	65.7	65.2
Smaller municipalities	27.7	43.8	37.7	34.2	33.9	34.3	34.0	36.8	49.3	49.8	49.1	49.7	50.0	49.4	49.3	49.8	50.7	51.5	49.1	52.7	57.1	58.9	64.0	64.0
Unadjusted proportions (%)																								
Metropolitan areas	29.9	46.6	42.0	38.5	38.3	39.1	41.1	43.4	55.0	55.8	56.5	57.2	57.9	58.3	58.5	59.1	59.0	60.1	57.6	61.8	64.3	66.1	69.5	69.8
Larger municipalities	29.6	44.6	39.5	36.3	36.1	36.9	38.5	40.8	53.2	54.9	55.0	55.3	55.7	55.5	55.9	55.5	55.6	56.3	53.4	57.2	60.4	62.4	66.4	65.7
Smaller municipalities	25.8	42.0	35.9	32.7	32.3	33.1	33.5	36.7	49.6	50.7	50.3	50.6	50.6	50.5	50.1	50.0	50.7	51.6	49.0	52.3	56.6	58.3	62.9	62.6
Total number	28,667	41,265	33,962	29,774	29,441	29,984	32,119	34,189	46,766	49,553	51,478	52,229	54,599	55,642	56,596	57,844	59,266	58,884	56,739	60,908	65,410	67,386	73,103	71,412

Source: Authors' calculations based on register data.



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