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Decomposing the Determinants of Fathers'  
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Evidence from migration between Finland and  
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# Decomposing the Determinants of Fathers' Parental Leave Use: Evidence from migration between Finland and Sweden

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**Abstract:** The use of parental leave by fathers varies notably between countries. However, the underlying reasons for cross-country differences have not been explicitly studied. We use migration between Finland and Sweden as an instrument to decompose the role of policy design and social norms in the differences in take-up rates between these two countries. First, by looking at fathers from the same country of origin in various policy contexts, we infer the role of policy. Second, by examining fathers who migrated at different ages and fathers with spouses of different origins, we deduce the role of norms. We find that the large cross-country differences in fathers' use of parental leave between Finland and Sweden stem mainly from differences in policy design. Norms seem to play a smaller, but still significant, role.

**Keywords:** Immigrant, Parental leave, Fathers, Finland, Sweden

## 1. Introduction

A number of countries promote more gender equality regarding participation in childcare and labour force participation through paid parental leave for fathers (see Blum et al., 2017 for an overview). However, the take-up rate of parental leave by fathers varies substantially between the national policy systems. In some countries such as Finland, fathers' take-up has remained low despite some policy efforts. In other countries, Sweden for instance, nearly all fathers take parental leave (OECD, 2016).

Little is known about the underlying reasons for some countries being more successful regarding this issue than others. To what extent does policy design affect the percentage of fathers taking the leave? Or do the differences stem from varying social norms regarding fathers' participation in childcare? These two things naturally correlate to some extent; policy systems in democratic societies are bound to, at least to some degree, reflect the prevailing social norms. However, there are lots of other interfering factors such as complex political processes (Orloff and Skocpol, 1984; Salmi and Lammi-Taskula, 2015) and fiscal limitations (Gough, 1979). At the same time, policies like parental leave schemes have been found to steer the public opinion and norms (Kotsadam and Finseraas, 2011; Unterhofer and Frohlich, 2017).

Currently, determinants of fathers' parental leave use are, to a large extent, understood through national-level evidence. The impact of policy design has been studied mainly through national policy reforms (e.g. Duvander and Johansson, 2012). The impact of norms has typically been studied through proxies such as education levels (e.g. Geisler and Kreyenfeld, 2011) or attitudes of parents (Duvander, 2014), but within countries, thus exploring individual variations, not national variations.

Few studies have tried to disentangle the scope of the various factors behind the cross-country differences in fathers' use of parental leave. In this study, we aim to fill this gap. We argue that migration experience provides a quasi-experimental setting where the question can be studied. More specifically, we concentrate on the extensive migration paths between Finland and Sweden. This context is well-suited to our purpose because, between these two countries, there are substantial differences in the take-up of parental leave by fathers, and differences in policy systems and, to some extent, gender attitudes. Further, detailed register data are available in both countries.

First, by looking at fathers from the same country of origin and other observed characteristics in different policy contexts, we infer the role of policy. Second, by comparing fathers who migrated at different ages and fathers with spouses of different origins, we examine the role of norms. The approach of using age at migration is based on the assumption that social norms are internalized typically in youth through a process of primary socialization, a common idea in sociological and psychological literature (Parsons and Bales, 1956; Maccoby and Jacklin, 1974). In comparing fathers who migrated at different ages, we deduce whether they were likely to have undergone this socialization process in their country of origin or their destination country. Moreover, we assume that couples of mixed origins possess elements of social norms from both origins (e.g. Gordon, 1964; Kalmjin, 1998). Therefore, if norms matter, fathers' use of parental leave among mixed couples are expected to fall in-between the two groups of homogenous couples.

The method of using international mobility as an instrument to decompose norms has been previously used for multiple outcomes such as divorce, fertility or gender gaps in employment (Furtado et al., 2013; Milewski, 2010; Stichnoth and Yeter, 2013; Antecol, 2000). Whereas most previous studies concentrate on multiple immigrant groups in a single country, our study specification exploits two-way mobility between two countries. We use comprehensive register microdata, which includes fathers with first births between 1999 and 2009. In addition, we aim to control for the effect of observed confounding factors, such as the length of stay in the destination, labour market attachment and demographic factors, by implementing linear probability models.

The organization of the study is as follows. In Section 2, we present a short overview of theories on the determinants of father's parental leave use. In Section 3, we introduce the context: the policies, the evidence on gender norms and the migration history between Finland and Sweden. Next, we present our research hypotheses. The data and method of analysis are described in Section 5. In Section 6, we discuss the results, and Section 7 serves as a concluding summary.

## **2. Determinants of fathers' parental leave use**

A large body of research has examined the determinants of fathers' parental leave use and, more broadly, gender division of household tasks and employment inside the family. Three levels of determinants can be distinguished, but most literature concentrates on the

association between micro-level, i.e., individual or family-level factors, and fathers' parental leave use. The economic contexts of the household and parents, for instance, have been found to play a role (Sundström and Duvander, 2002). Previous studies have also addressed the role of the education of the father and their spouses (Hobson et al., 2006), as well as the country of birth (Tervola et al., 2017) and the time spent in the destination country (Mussino et al., 2016).

In addition, meso-level factors, such as the employer's and co-workers' attitudes at the father's workplace, has been found to play a role (e.g. Haas et al., 2002). Working as self-employed or in a small male-dominated workplace in the private sector might hinder the use of parental leave (Brandth and Kvande, 2002; Bygren and Duvander, 2006). Finally, macro-level factors, such as national policy systems or socio-cultural norms on fathering and gender issues, affect the take-up. In this study, we are interested specifically in this broadest scope: the role of policy systems and norms in national level.

Policy systems regarding issues such as parental leave create financial incentives to certain kinds of behaviour. Some policy features are clearly effective in increasing the use of parental leave by fathers. Duvander and Johansson (2012) found that fathers increased their use when father's quota was introduced in 1995 and then later extended in 2002. Also, increasing flexibility in how the parental benefit can be used seems to facilitate fathers' use of parental leave (e.g. Tervola et al., 2017). On the other hand, social norms regarding gender roles and fathering have also been found to matter. Micro-level survey evidence from Sweden and Finland provides some support to the notion that gender attitudes do impact fathers' use of parental leave (Duvander, 2014; Salmi and Lammi-Taskula, 2015).

The attitudes are known to vary, not only at micro-level, but also between countries on average. Existing comparative surveys, such as the World Value Survey or the International Social Survey Program (ISSP), provide empirical data on how gender norms on average vary between countries (e.g. Kenny and Patel, 2017; Ylikännö et al., 2016). Similarly, comparing leave policy preferences in Austria, Sweden, Switzerland and the U.S., Valarino et al. (2015) found that leave preferences mostly vary at the national level, rather than at the individual level, reflecting the differences in leave policy schemes.

According to the sociological and psychological theory of socialization, social norms are mainly internalized in primary socialization, which occurs in childhood and adolescence (Parson and Bales, 1956; Maccoby and Jacklin, 1974). An important part of primary

socialization is gender socialization where individuals learn sex-typing, i.e., the behaviour considered appropriate for a given sex. Traditional literature on the topic states that primary socialization occurs at preschool age, mainly via parents' behaviour (Parsons and Bales, 1956; Maccoby and Jacklin, 1974). However, later scholars have emphasized that, although the development is concentrated in the early formative years, gender socialization is a continuous process across the life span (see e.g. Katz and Ksansak, 1993). Unterhofer and Wrohlich (2017) observed modification of gender attitudes due to paternity leaves even among grandparents.

### **3 The policy context of Finland and Sweden**

#### **3.1 Leave policies**

Finland and Sweden are typically considered comparatively gender-equal countries where women and men have some of the most equal opportunities in the world regarding working life and other domains (World Economic Forum, 2015). However, parental leave use has remained far more gendered in Finland than in Sweden (OECD, 2016) and it is clear that differences in leave policies are at least partly the reason. Both countries introduced leaves available to fathers roughly at the same time, Sweden in 1974 and Finland four years later. However, Sweden transformed all parental leave into gender-neutral parental leave, whereas in the Finnish system, fathers were only allowed to use a maximum of two weeks of the total 7.5 months. At the time of introduction, a father's use of parental leave was always deducted from the mother's share in both countries.

During the following years, fathers were incentivized to participate in childcare by the introduction of paternity leave in both countries. However, paternity leave was fundamentally different to parental leave; it was a short leave to be used at the time of the birth while the mother was also at home, and it therefore lacked the element of individual time spent between father and child.

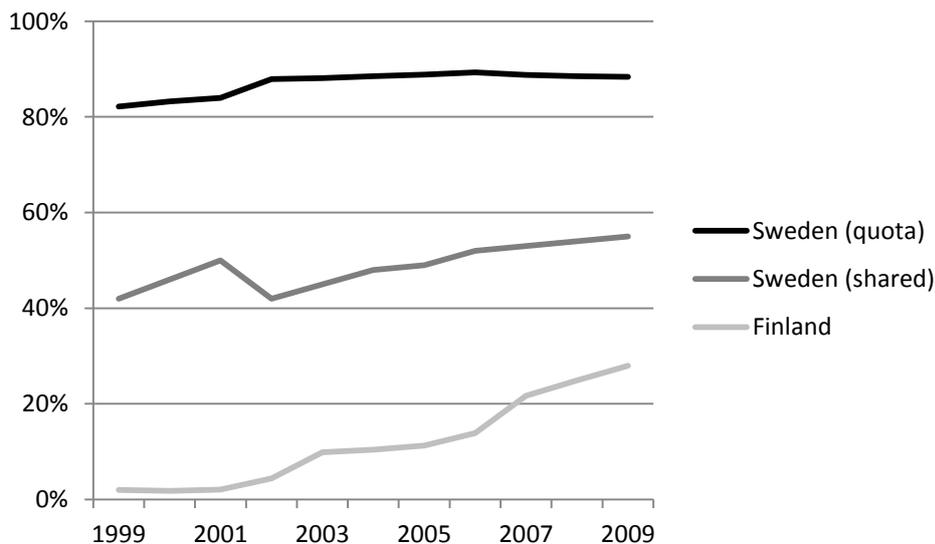
Paternity leave found popularity among fathers while the take-up of parental leave remained low in both countries. However, in 1995 Sweden started to take bigger steps to increase fathers' participation in parental leave. Equal-sized one-month quotas were introduced to both parents in the 15 months long leave. This provided a stronger incentive for fathers to take the leave, as it would otherwise be lost. The quotas for both parents were

extended by one extra month in 2002 and a third month in 2016. The effect of these reforms has been reported by various researchers (Duvander and Johansson, 2012).

Finland went in the same direction as Sweden, but took much more modest steps (see also Hiilamo 2002). The three-week paternity leave was the major policy component for fathers until recently. In 2003, two bonus weeks for fathers were introduced to incentivize fathers to use the parental leave. However, the access to the bonus weeks was conditional on the father’s use of the last two weeks of parental leave, and thus remained dependent on the mother’s consent. The bonus weeks encouraged only a small proportion of fathers to use the parental leave. In 2013, the condition was abolished, officially establishing a father’s quota in Finland, 18 years after Sweden. Recently, the policy differences have been narrowed down further: in 2017, two months of leave is reserved for fathers in Finland, whereas three months and two weeks in Sweden, including paternity leave.

Hence, it is clear that Sweden has been more coherent in encouraging shared responsibility for childcare. This can also be seen from Figure 1; fathers’ take-up rate of parental leave in Finland remained marginal until 2003 when the first reforms started to take effect.

**Figure 1. Take-up rates of parental leave among native-born fathers in Finland and Sweden by child’s birth year.**



Note: For Sweden we compare the use of the father’s quota (even one day of parental leave use) and the shared leave (even one day more than the quota).

Source: authors’ calculations.

The differences have not only been due to the long existence of a father's quota in Sweden. The use by fathers of a so-called 'shared leave', which is not allocated to either of the parents, has been much higher in Sweden (Figure 1). This may stem from two policy issues. First, in Sweden the shared leave is allocated to both parents equally. For one parent to use more than half of the leave, the other parent must give consent. In Finland, the shared leave is not explicitly allocated to either of parents. The one who applies for it first, gets it. Second, the leave policy in Sweden allows parents to use parental leave much more flexibly than the Finnish policy. They can use it part-time, and they can combine it with unpaid leave. They also have the option of postponing the leave until the child turns twelve years (eight years before 2012). In Finland, fathers had to use the leave right after mother until 2007. After 2007, fathers could postpone the leave until child reached 1.5 years, and after 2010 the age was extended to two years. Furthermore, possibilities for part-time use of leave in Finland have been non-existent or very limited.<sup>1</sup>

Especially in Finland, goals other than gender equality have also affected the development of family policies. The cash-for-care scheme, that is, a flat-rate benefit paid for child care at home after the parental leave, was introduced in 1985 to alleviate the public expenditure on day care (Sipilä and Korpinen, 2002). Currently, the policy is used for almost nine out of ten children (Haataja and Juutilainen, 2014). Moreover, in 19 out of 20 cases, the policy is used by women (Social Insurance Institution of Finland, 2017), further accentuating the gendered differences in parental care and labour market participation. Further, the stipulation that fathers are not allowed to use parental leave while the mother is registered for cash-for-care significantly hinders fathers' use of parental leave in Finland (Salmi and Lammi-Taskula, 2015). A similar policy was in force in Sweden from 2008 to 2016. However, only certain municipalities introduced it, and the take-up rates remained marginal (2% in 2014) before its abolition (see Duvander and Ellingsæter, 2016).

In addition to parental leave for fathers, gender-equal participation in the labour force is supported in both countries through a universal provision of low-cost day care services. Mothers are expected to return to the labour force after a period of parental leave (and cash-for-care in Finland). All these policy factors contribute to the fact that female labour force participation is comparatively high in both countries (Thévenon, 2013).

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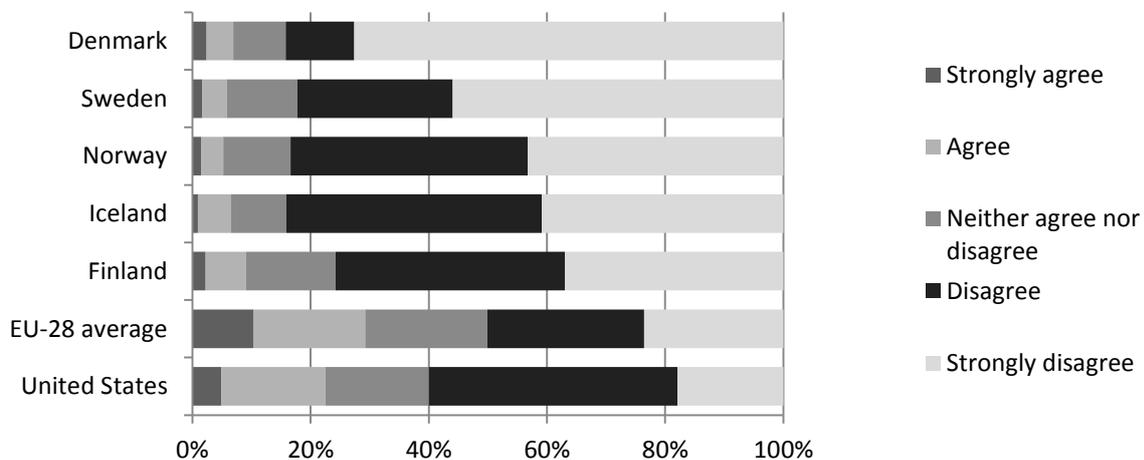
<sup>1</sup> Since 2003, it has been possible in Finland to use the leave part-time, if both parents simultaneously work 40%–60% of the full working time. Then, half of the parental benefit is paid to each parent. Only a handful of parents have made use of part-time leave in Finland.

### 3.2 Gender attitudes

Comparative empirical evidence about the gender attitudes between Finland and Sweden is scarce. Some cross-country surveys such as the International Social Survey Program (ISSP) have examined the issue. As shown in Graph 2, the Swedish population demonstrates slightly more equal views on the division of household tasks than the population in Finland, which scores at the bottom among Nordic countries, although the country clearly has more equal attitudes than the United States or the countries in European Union on average.

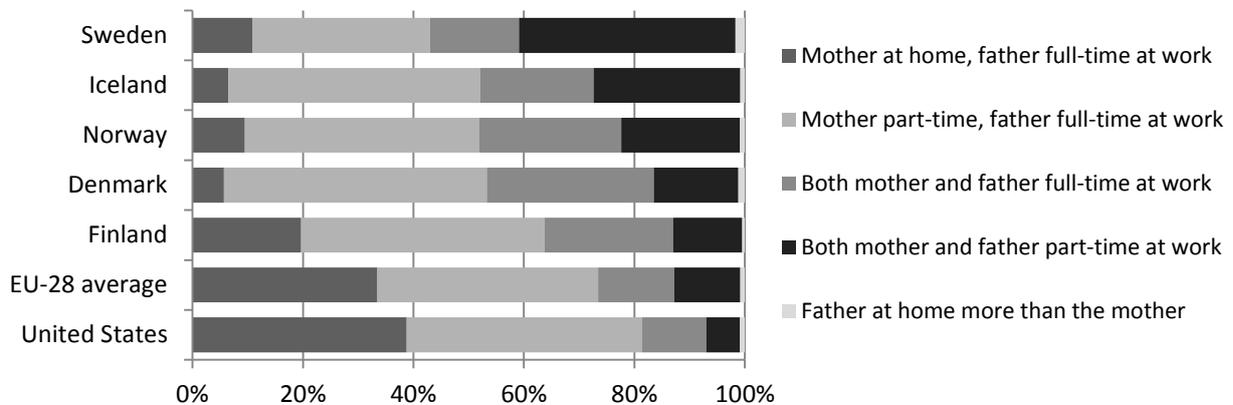
More explicit question about the gendered division of child care and employment (Figure 3) reveal more differences. One fifth of Finns support a traditional male breadwinner model, whereas only one in ten do in Sweden. It seems to be the Finnish men who most often support the more traditional gender division of labour and childcare. Finnish women possess more gender-equal views. In Sweden, there are no significant differences between the attitudes of men and women (Ylikännö et al., 2016).

**Figure 2. Compliance to the statement “Men's job is to earn money, women's job is to look after the home”.**



Source: ISSP survey 2012 - Family and Changing Gender Roles IV. The number of observations vary between 1030 and 1407 per country.

**Figure 3. The parental childcare option considered the best when child is less than a year old.**



Source: ISSP survey 2012 - Family and Changing Gender Roles IV. The number of observations vary between 1030 and 1407 per country.

If only relatively slight differences exist in attitudes between Finland and Sweden, why have parental leave policies for fathers developed at such different paces? Salmi and Lammi-Taskula (2015) explain this partly by the tripartite negotiation system, which greatly impacts the decisions over work-life policies in Finland. Practically all decisions are compromises between the government and employee and employer organizations. The goal of gender equality has not been very widely supported by employer organizations or some employee organizations. Rather, the contradicting argument of families’ ‘freedom to choose’ has found more support (Hiilamo and Kangas, 2008).

Therefore, it is evident that the population in Sweden possesses more gender-egalitarian attitudes than Finns do on average. Similar differences prevail between the policy systems.

### 3.3 Migration between Finland and Sweden

Migration between Finland and Sweden in the past century has been facilitated, not only by geographical proximity, but by a common cultural history: Finland was part of the Swedish empire until 1809. Towards the end of the 19<sup>th</sup> century, Swedish influence started to lose ground to Finnish nationalists. At the time of Finnish independence in 1917, the Swedish language was granted the status of a second official language. However, since the beginning of the 20<sup>th</sup> century, the share of registered Swedish native speakers has decreased from 13% to 5% of population, partly due to extensive migration to Sweden (Statistics Finland, 2017).

Despite the shared elements of cultural history, migration between Finland and Sweden was fairly marginal before World War II. However, during and after the war, the situation changed drastically. More than 100 000 children and other refugees fled Finland to Sweden during the years of the war. The second wave of migration took place at the end of the 1960s. The economic structure of Finland had started to shift away from traditional agricultural industry. At the same time, Sweden had an economic boom and a chronic labour shortage in the expanding industries. This gave impetus to a mass migration of 80 000 Finns during 1969 and 1970. After the turn of the decade, emigration to Sweden settled to a still significant flow of 10 000 individuals per year (Martikainen et al., 2013.) In the 1980s, the numbers waned to 5000, and in the 1990s, to 3000 individuals per year on average. The rate has been fairly stagnant since (Hedberg and Kepsu, 2003; Statistics Finland, 2017).

Overall, more than half a million Finns moved to Sweden over a 50-year period. The peak magnitude of Finnish population in Sweden was reached at the end of 1970s when Finns constituted more than 3% of the total population in Sweden. However, more than half returned to Finland after a few years in Sweden. Today the Finnish-born still constitute the most extensive group of migrants in Sweden, totalling 10% of the foreign-born population and 1.5% of total population in 2016 (Statistics Sweden, 2017).

In the case of Finnish migration to Sweden, the selection of different migration cohorts has varied substantially. The emigrants to Sweden at the turn of 1970s were mostly rural individuals seeking employment (Martikainen et al., 2013). Afterwards, Sweden started to attract a different part of population, namely more females, and more urban and more educated individuals (Hedberg and Kepsu, 2003). The Swedish-speaking minority has always been over-represented among the emigrants (Hedberg and Kepsu, 2003), partly due to experienced shorter cultural distance to Sweden (Hedberg, 2008).

Finnish migrants have integrated relatively well in the Swedish labour markets. The data on migration cohorts at the turn of the millennium demonstrate that the employment trends of the Finnish-born are at higher levels than that of other immigrant groups (Statistics Sweden, 2009). However, non-employment is still more common among the Finnish-born than the native-born population (Saarela and Finnäs, 2007; Saarela and Rooth, 2006).

In 2016, approximately 32 000 individuals, i.e., 0.6% of the Finnish population had been born in Sweden. Migration of the Swedish-born to Finland has been mostly return migration of Finnish descendants. In 2015, approximately 86% of Swedish-born migrants in Finland

had parents born in Finland (Statistics Finland, 2017). The remaining 14% likely included descendants with more distant ties to Finland, as well as small amounts of ‘genuine’ family and labour migration with no prior ties to the destination. Swedish-born migrants seem to fare well in the Finnish labour market. In 2011, their unemployment rate was 8.4%, which was one percentage point lower than that of the native-borns (Statistics Finland, 2013).

#### **4 Research questions and hypotheses**

The aim of this study is to use the immigrant experience to decompose the impact of policy design and socialization in the use of parental leave by fathers. To fulfil our goal, we ask two overarching research questions and test four different hypotheses.

##### **1. How much does policy design affect fathers’ parental leave use?**

Policy design likely explains the cross-country differences in leave use between Finland and Sweden to some extent, but it cannot explain the potential differences among fathers from different countries of origin now living in the same country. Accordingly, we test two contradicting hypotheses.

- **Hp1:** Fathers’ parental leave use is determined to a great extent by the policy system, and norms and other possible factors play marginal roles. Therefore, we expect to find few or no differences between Finnish-born and Swedish-born fathers living in the same country in using both quota and shared leave, in particular after controlling for confounding factors.
- **Hp2:** Fathers’ parental leave use in a new destination reflects to a great extent the patterns and norms in his country of origin. Therefore, we expect to find significant differences between Finnish-born and Swedish-born fathers living in the same country, even after controlling for confounding factors.

##### **2. How much do social norms affect the use of parental leave by fathers?**

We use the immigrant experience to study the impact of social norms on fathers’ parental leave use. Because the occurrence of *gender* socialization is concentrated in, but not limited to, the time before adolescence, we use the age at immigration to infer whether a father has undergone his *gender* socialization process in Finland or Sweden. Multiple previous studies have used immigrants to assess the role of *culture* in outcomes such as divorce, fertility and gender gaps in employment (Furtado et al., 2013; Milewski, 2010; Stichnoth and Yeter, 2013; Antecol, 2000). Additionally, some researchers have examined age at migration to study the

role of socialization, e.g., in fertility (Abbasi-Shavazi and McDonald, 2002, Mussino and Strozza, 2012), or sexual (Weiss and Tillman, 2009) or smoking behaviours (Wilkinson et al., 2005).

- **Hp3:** Being exposed to the norms of a country during adolescence determines a father's parental leave use. Therefore, fathers who migrated before their early teens use parental leave in similar ways as fathers in their destination, even after controlling for confounding factors.

Moreover, we test whether the origin of the spouse affects fathers' parental leave use. A large amount of empirical evidence shows how individuals demonstrate the pattern of assortative mating, i.e., coupling with partners who share similar characteristics such as education levels or ethnicity (Mare, 1991; Bisin and Verdier, 2000). Similarly, intermarriage, i.e., being in a relationship with a spouse of different origin, is a sign of shortened social distance between the partners (e.g. Gordon, 1964; Kalmjin, 1998). Therefore, we expect the couples with mixed origins to possess elements of social norms from both origins.

- **Hp4:** Fathers with a spouse from the same origin are more likely to follow the norm of the origin, as norms are strengthened in the couple. Respectively, use of parental leave in couples with mixed origin should fall in-between the take-up rates of the two groups of homogenous couples (Finnish-born and Swedish-born).

## 5 Data and methods

For both countries, we use detailed longitudinal register microdata for children born between 1999 and 2009. For Finland, we use data consisting of a 60% random sample of all mothers who have given birth in each year (see Juutilainen, 2016 for details). For Sweden, we use the collection of data STAR (Sweden over Time: Activities and Relations), which contains information on the total population. Following the research question, the analysis incorporates Finnish- and Swedish-born migrant and native populations. The rest of immigrant populations are excluded from the analysis. The numbers of observations in each cell are presented in Table 1.

**Table 1. Number of observations in studied populations.**

	Swedish-born	Finnish-born
Native	336 563	124 274 <sup>a</sup>
Migrant	1 748 <sup>a</sup>	2 483

<sup>a</sup> The numbers are from 60 percent sample of total populations. The rest of the figures are total populations.

At the time of the study, a father's eligibility for parental leave in Finland depended on his coresidence with the mother, which was not the case in Sweden.<sup>2</sup> To increase comparability between the countries, we exclude single adult households from the analysis. Consequently, separated, emigrated or deceased parents are excluded from the analysis. In addition, we concentrate on first births, or more accurately, on parents with only one child in their household at the end of the birth year. In this way, the information on parents' employment and wages is not affected by the take-up of leave with previous children.

Some differences exist in the data structures between the countries. In the Finnish data, we observe the use of parental benefits per child, whereas the Swedish data are constructed at parent level. Therefore, it is impossible in the Swedish data to separate the parental benefit paid for the first child from that paid for consecutive children. Multi-child families may have more days of parental leave available during the follow-up, which in turn may increase the probability that fathers will use the leave. Consequently, we ran a validation test by controlling for additional births during the two follow-up years. However, this did not have any visible effect on the results. Because of this, and the fact that the decision to have consecutive children can be seen as endogenous to the father's take-up of leave, we only report the results in which additional children are not controlled for.

During the study period, Swedish parents can extend or postpone the use of parental benefit until the child turns eight years old. To simplify, we chose to follow the fathers' use of parental benefits in Sweden only during the birth year and the two consecutive years. As

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<sup>2</sup> Whereas all mothers with custody who reside in Finland or Sweden have right to parental leave, fathers' eligibility for benefits differs between the two countries. A father's entitlement to parental leave in Sweden is tied to the custody of the child, which in the case of separation typically remains with both parents. In Finland, the father's entitlement was more restricted until 2017, being tied to marriage or cohabitation with the mother regardless of custody.

most of the leave is used during the first two years (see Swedish Social Insurance Agency, 2016), the binary indicator of take-up is not largely affected by the truncation.

Moreover, in the Swedish data, parental leave use is observed on an annual basis. Therefore, the length of the follow-up depends greatly on the month the child was born, meaning higher probabilities for take-up of leave if the child is born at the beginning of the year. Any discrepancies in the follow-up are taken into account by controlling for the month of birth in the regression model.

The analysed outcome is the binary take-up of parental leave. This excludes the use of paternity leave, the leave that is to be taken simultaneously with the mother's leave. The policy differences between the countries spur some substantial differences in measuring parental leave. In Finland, the take-up indicator measures the use of shared leave because, at the time, the Finnish system did not incorporate the father's quota. Nevertheless, since 2003, fathers have been incentivized to use the leave by giving them access to two bonus weeks only if they use two weeks of the shared leave. Because fathers' parental leave in Finland is a shared leave with extra incentives, we compare it to both the use of the father's quota (even one day of parental leave use) and the shared leave (even one day more than the quota) in Sweden.

First, we test the impact of policy design by examining the take-up rates of fathers with different origins in the same destination. Second, we test the impact of socialization by comparing fathers that have migrated at different ages as well as the impact of the spouse's origin. In both analyses, we aim to control for confounding factors such as labour market attachment and demographic factors. In the analysis of socialization and age at migration, we also control for the number of years since migration, which is likely to reflect unobserved features of labour market integration.

Table A1 shows the exact control variables and their distributions in studied populations. The controlled socio-economic factors include the employment statuses of the parents and wage level of the father. Following Tervola et al. (2017), an individual is regarded as employed when his annual wage exceeds the threshold of twice the first decile of monthly wage in the annual wage distribution. Further, we control for wage level by dividing the wages into terciles. In addition, we control for the father's age, which accounts for some variation in labour market positions but perhaps also in attitudes.

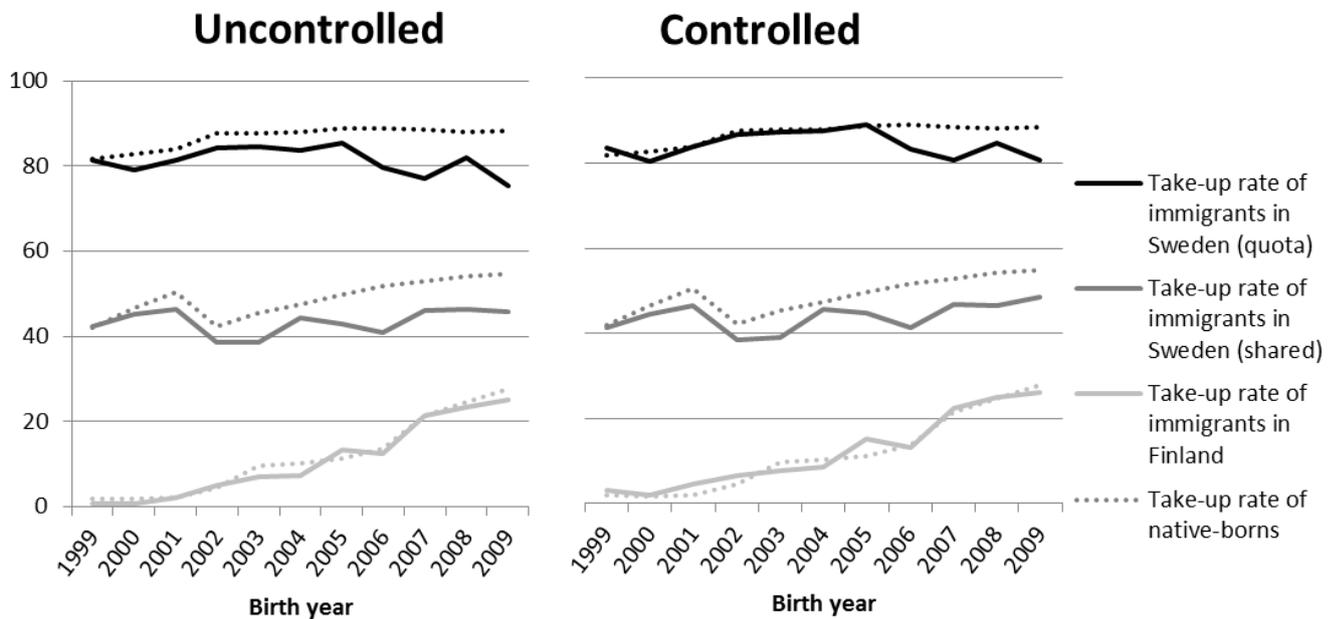
The controls are implemented by running a linear probability model separately for both countries. To compare the controlled take-ups, we calculate population marginal means (see e.g. Searle et al., 1980) holding covariates fixed at the population means of the two data sets. Consequently, the comparison applies between the migrant population and the population in the destination, rather than the source population, which has a slightly different margin (see Table A1). To investigate whether the selection to migration affects the results, we also made a test where we set the controls to the same, balanced margin in the two countries. However, this did not change the results notably.

## **6 Results**

### **6.1 How much does policy design affect fathers' parental leave use?**

Figure 4 shows the take-up rates of leave in Sweden and in Finland for migrant and native fathers. The left-side figure presents crude take-up rates whereas the right-side figure shows population marginal means where controls are set to population means in the destination country. We can see clearly that the take-up rates of migrant fathers resemble mostly that of populations in the destinations rather than the origin countries, implying the strong response to the policies of the country of residence. In Finland, the take-up rate of Swedish-born fathers overlaps with the native-born population. In Sweden, the Finnish-born fathers use parental leave nearly as much as native-born Swedes, and much more than their compatriots in their country of origin, even if the gap has decreased over calendar years. The gap between Finnish- and Swedish-born fathers in Sweden is slightly more visible in the use of shared leave than in the use of father's quota.

**Figure 4: Take-up rates of leave by child’s birth year for migrant and native-born fathers in Finland and Sweden.**



Note: On the left, crude take-up rates are presented whereas right-side figure presents population marginal means where controls are set to population means in the destination country, we control for the year and month of birth, father's wage level, father's age, father's income share, mother's employment, mother's country of birth.

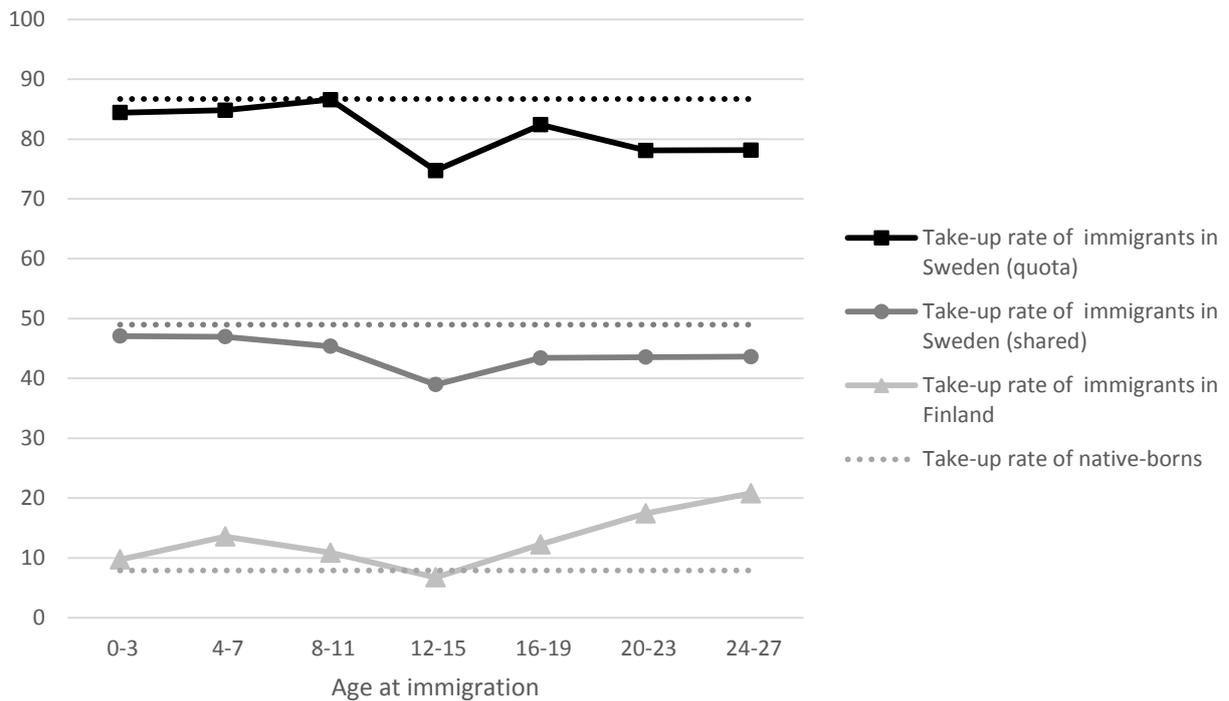
The existing gaps in the Swedish data diminish further once we introduce controls for socio-economic and demographic factors reflecting that; in this case, fathers' parental leave use is, to a great extent, dependent on the policy design (Hp1 confirmed, Hp2 rejected). However, especially after 2005, Finnish fathers in Sweden show a lower take-up (about a seven percentage point gap). The gap is more visible in the use of shared parental leave than that of the quota.

## 6.2 How much do social norms affect fathers' parental leave use?

The primary socialization hypothesis states that gender norms are internalized at a certain age, before adolescence (Parsons & Bales 1956). Therefore, if a person migrated after this age, the take-up patterns should resemble more that of the origin than that of the destination.

Figure 5 shows the take-up rates by age at immigration when length of stay and socio-economic characteristics are controlled for. Among the Finnish-born in Sweden, the fathers who have migrated before the ages of 12–15 use parental leave similarly to native-born Swedes. Those fathers that have migrated at an older age, have approximately ten percentage point lower take-up rates of both father’s quota and the shared leave. Therefore, the analysis provides some supporting evidence of socialization, thus confirming Hypothesis 3.

**Figure 5. Take-up rates of parental leave by age at immigration.**



Note: We control for year and month of birth, years since migration, years since migration squared. The controls are set to population margins among migrant populations.

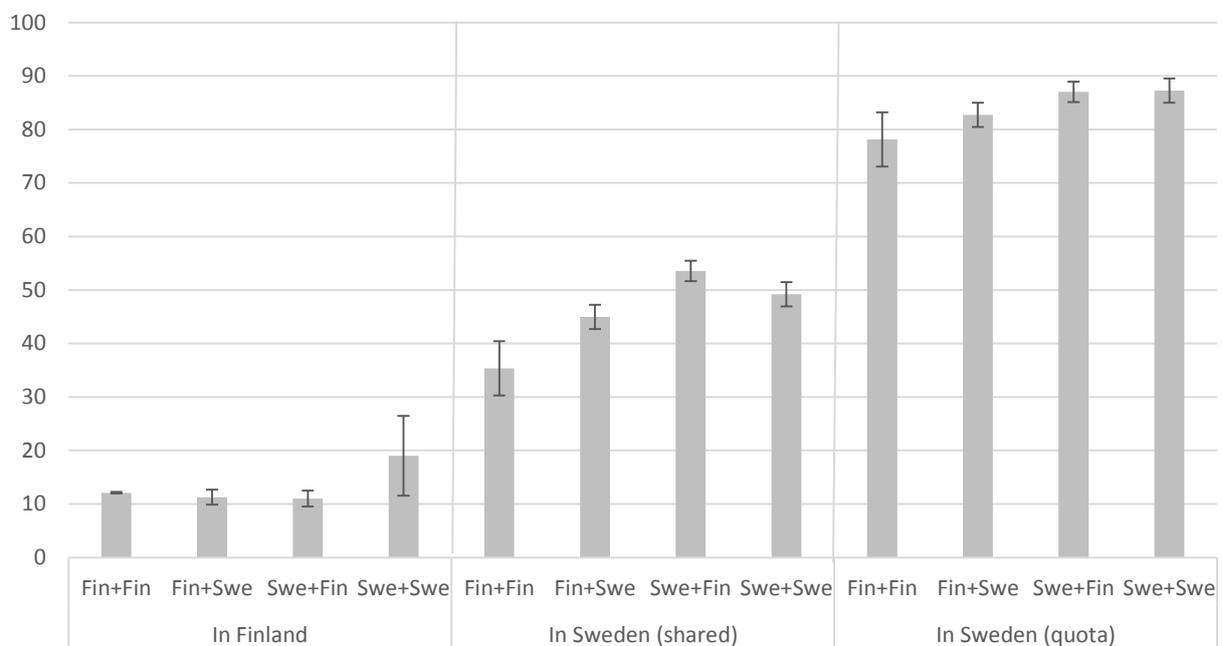
The Swedish-born in Finland demonstrate a similar pattern but at slightly later ages; the take-up rates of the fathers who migrated after the ages of 12–15, have higher take-up rates. The take-up rates of Swedish-born fathers in Finland continue to increase when migration takes place at later ages, in their late 20s, implying that the gender norms continue to modify also after adolescence.

All in all, the role of policy systems seems to be, in this case, more determining than the socialization of norms. Among both examined migrant groups, fathers’ use of parental leave resembles that of the destination country rather than the country of origin, even if the father migrated at a later age.

Figure 6 presents the fathers' use of parental leave in Finland and Sweden by the combination of fathers' and mothers' origins. In Finland, mixed couples where fathers and mothers are of different origins, have similar rates of take-up as when both parents are native-born Finns. When both parents are Swedish-born, the take-up rate is clearly higher. It should be noted that the low number of observation results in large confidence intervals.

In Sweden, parents of different origins demonstrate a somewhat similar pattern than found in Finland. Couples in which both parents are Finnish-born have the lowest take-up rates of both types of leave. However, mixed couples show a more ambiguous pattern in the case of shared leave: take-up rates in couples with a Swedish-born father and a Finnish-born mother exceeds those of couples where both are Swedish-born. For using father's quota, couples with a Swedish-born father and Finnish-born mother demonstrate similar take-up rates as couples where both parents are Swedish-born, which departs from our hypothesis (Hp4). All in all, the patterns found for homogenous couples are in line with our hypotheses, whereas mixed couples demonstrate somewhat ambiguous patterns of fathers' use of parental leave.

**Figure 6. Take-up rates of parental leave in Finland and Sweden by the origin of the parents (father + mother).**



Note: 95% confidence intervals. We control for year and month of birth, father's wage level, father's age, father's income share and mother's employment. The controls are set to population margins in destination countries. Parents with other origins than Finnish or Swedish are not presented.

## 7 Discussion

This paper sets out to achieve a deeper understanding about the mechanisms behind the cross-country differences in use of parental leave by fathers. We take the example of how immigrants to and from Finland and Sweden adapt to the use of parental leave in their new host country. We pay special attention to fathers' age at migration to estimate if the father underwent his *gender* socialization process in Finland or Sweden. Moreover, we compare different combinations of fathers' and mothers' origins to see the effect of spousal origin and norms. The setting is well-suited for the study as the migration flows between the countries are major and, even if the societies are similar in many ways, differences regarding family policy and gender attitudes exist to some extent.

Our first conclusion is that cross-country differences in fathers' parental leave use between Finland and Sweden stems mainly from policy design. Finnish-born men in Sweden use parental leave at quite similar rates to native-born Swedes. Likewise, the use of the leave of Swedish-born men in Finland aligns with that of native-born Finns in Finland. When controlling for a number of socio-economic and demographic factors, the small remaining gaps diminish further. However, it seems that in Sweden, with a policy increasingly encouraging gender equality primarily with longer quotas, the Finnish-born fathers are falling behind the native-born in using the parental leave over time. Thus, it may be that differences in policies and norms between origin and destination country delays adaption to the new context and policy.

Our second interest in the paper was to discuss the importance of socialization in how policy is used. Here, we employ the variations in fathers' ages at immigration and the origin of the mother. We observe a slight socialization effect in age at immigration when other factors such as length of stay is held constant; those men who migrated before adolescence (approximately age 15) use parental leave in the same manner as the native-born in the destination country. Respectively, for those who migrated after the formative years, fathers' parental leave use more closely resembles the take-up rates in their country of origin. Whereas most scholars agree that the formative years of *gender* socialization are concentrated to the years before and during adolescence, Finnish results hint that the process continues at later ages. Therefore, the finding is in line with some previous results (Kotsadam and Finseraas, 2011; Unterhofer and Frohlich, 2017).

The role of norms is somewhat supported by the fact that having a spouse of same origin strengthens the patterns of take-up found in origin. That is, homogenous Swedish-born couples use leave typically the most, and homogenous Finnish-born couples use leave the least, regardless of the policy system where they reside. This might be the case because their original values are strengthened by this constellation of couples. The migration flows between the countries are vivid and one possibility may be that their intention to stay in their current country of residence is weak, perhaps planning to go back to their country of origin.

Although we found some support for the effect of socialization on fathers' parental leave use, policy systems seem to play a more decisive role in the studied context. This is demonstrated by the finding that even for fathers who migrated at later ages, the use of leave most closely resembles the level of native-born in their current country of residence, rather than in their country of origin.

Our conclusion fits well with earlier research about the importance of policy design (e.g. Duvander and Johansson, 2012; Tervola et al., 2017) as well as research on norms (Duvander, 2014; Salmi and Lammi-Taskula, 2015) in fathers' parental leave use. However, the novelty of our research lies in our aim to estimate the relative size of these effects in a cross-country setting, including Finland and Sweden. The generalizability of these results to other contexts is limited, however. The present context is characterized by relatively small differences in gender norms. Moreover, our method can only be used as such between countries that have introduced a particular policy system, parental leave for fathers in this case. Therefore, it excludes a large number of countries.

It is also pertinent to note that the quasi-experimental setting with immigrants does not allow firm conclusions about causal mechanisms. Selection for migration is not random and neither are age at migration or selection of spouse. Age at migration, for instance, also reflects the migration motives. Those fathers who migrated in their childhood with their parents may differ significantly from those who migrated as young adults. Therefore, we cannot rule out potential unobserved confounding factors that remain uncontrolled in our study. To give more confirmation to the patterns found in this study, we encourage that the findings of the study be tested further in different locations and perhaps with different specifications.

Despite these uncertainties, this study reveals valuable and novel evidence on the determinants of fathers' parental leave use. In the case of comparing Finland and Sweden, policy design clearly seems to be more strongly linked to fathers' leave use than factors

related to social norms of gendered behaviour. This provides encouraging evidence for other countries planning to incentivize fathers to increase their parental leave use.

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## Appendix

**Table A1. Data distributions.**

	Swedish-born		Finnish-born	
	Stayed in Sweden	Migrated to Finland	Stayed in Finland	Migrated to Sweden
<b>Total</b>	<b>336 563</b>	<b>1 748</b>	<b>124 274</b>	<b>2 483</b>
<b>Child's birth year</b>				
1999	7.6	7.6	8.9	12.4
2000	8.1	8.4	8.7	9.8
2001	8.4	7.8	8.8	10.0
2002	9.0	8.8	8.7	11.3
2003	9.3	9.6	9.1	9.6
2004	9.3	9.8	9.2	8.9
2005	9.3	9.2	9.2	8.3
2006	9.7	10.5	9.4	8.9
2007	9.7	9.3	9.3	6.7
2008	9.7	9.6	9.3	7.1
2009	9.8	9.6	9.5	6.8
<b>Father's wage level</b>				
Employed / low wage	23.0	33.5	25.9	22.4
Employed / medium wage	31.9	29.2	30.2	28.4
Employed / high wage	33.4	21.5	30.4	32.6
Self-employed	5.9	4.5	6.1	5.2
Not employed	5.9	11.2	7.4	11.4
<b>Mother's employment status</b>				
Not employed	10.2	20.6	14.0	16.1
employed	89.8	79.4	86.0	83.9
<b>Mother's origin</b>				
Swedish-born	92.0	3.7	1.5	73.4
Finnish-born	0.8	93.6	96.2	14.7
Other foreign-born	7.2	2.7	2.4	12.0
<b>Father's age at child birth</b>				
–25	10.2	23.3	19.1	5.3
25–29	33.6	42.4	34.0	20.4
30–34	35.4	24.9	27.0	32.9
35–39	14.3	5.4	11.6	24.0
40–	6.5	4.1	8.3	17.4
<b>Father's income share</b>				
0 (0–12 %)	1.3	1.9	1.6	3.6
25 (13–37 %)	5.0	9.7	8.9	6.7
50 (38–62 %)	70.4	49.7	53.2	64.4
75 (63–87 %)	19.8	31.3	30.8	17.5
100 (88–100 %)	3.5	7.4	5.5	7.9
<b>Father's age at migration</b>				
0–6	-	56.0	-	51.1
7–13	-	24.4	-	12.5
14–20	-	4.0	-	5.4
21–	-	15.6	-	28.3