



Stockholm  
University

Stockholm University Linnaeus Center on  
Social Policy and Family Dynamics in Europe, SPaDE

---

How Do Immigrants in Sweden Use Parental Leave?

Eleonora Mussino and Ann-Zofie Duvander

Working Paper 2014: 2

## How Do Immigrants in Sweden Use Parental Leave?\*

*Eleonora Mussino and Ann-Zofie Duvander*

Stockholm University Demography Unit

**Abstract:** Sweden is a universalistic welfare state with a family policy that strongly emphasizes gender equality. We investigate the differences in uptake of parental leave between native and immigrant women and the connection to labour market attachment. Sweden represents a unique case study not only because the strong effort of combining work and family for all women and men, the high level of fertility and the presence of immigrants in the country, but it also enables detailed and sophisticated analysis based on the high-quality data derived from its population registers. We find that immigrant mothers use parental leave more intensively than Swedish-born mothers. The differences diminish when labour market status is controlled for. Also, differences between immigrant mothers of different origin and residence in Sweden offer insight into how different dimensions of integration may be related to each other. Our results show that when immigrants are not discriminated in the labour market they are not disadvantaged in the use of parental leave.

\*This paper is also available as a *Stockholm Research Report in Demography*

## **Introduction**

For the past 50 years, Sweden has been a country of immigration. Today immigrants make up around 15 per cent of the country's population, and this share is even larger when only childbearing ages are considered (Statistics Sweden 2012). The immigrant population is characterized by heterogeneity by country of origin as well as differences in fertility behaviour (Lundström and Andersson 2012). There is a clear migration effect, with higher fertility among newly arrived immigrants (Andersson 2004), but with time in Sweden the fertility becomes increasingly similar to that of the Swedish-born population. However, especially immigrants from less developed countries remain at high levels of fertility. The Swedish Total Fertility Rate (TFR) at 1.9 is composed of 1.8 for Swedish-born women and 2.2 for immigrant women (Statistics Sweden 2010).

Like in many other countries, the labour market situation for the immigrant population is worse than for the native-born population (SCB 2008; 2009). While Swedish-born men and women have employment rates above 80 per cent, immigrant men and women have rates at just over 70 and 60 per cent, respectively (Statistics Sweden 2008). However, there is large variation over time and by country of origin.

The combination of both high labour force participation and high fertility is, in the Swedish universalistic welfare state, mainly possible through policies supporting working parents. The family policy makes no distinction based on citizenship and there are strong underpinnings of gender equality (Ferrarini and Duvander 2010; Oláh and Bernhardt 2008). This is perhaps best exemplified by the major aim of Swedish family policy: to enable the combination of work and family for all women and men living in Sweden. This study

investigates how well this is fulfilled for immigrant women by focusing on their use of parental leave.

The parental leave insurance consists of benefits based on prior earnings and a flat rate for parents who were not active in the labour market before becoming parents (Ferrarini and Duvander 2010). The leave can be used flexibly until the child turns eight. The differences in the labour market situation and in the fertility behaviour between the immigrant and Swedish-born population of Sweden lead to the expectation that parental leave use will also vary between the two groups. In a country where family policy is closely connected to the aim of labour market participation, parental leave use becomes a reflection of labour market integration. The question of immigrant women's parental leave use is therefore of major policy relevance, and is emerging on the agenda in Swedish politics (Duvander and Eklund 2006; SOU 2012; Vikman 2013). Earnings-related benefits and job protection during leave normally serve as an incentive to combine labour market work and children. However, if labour market integration cannot be achieved the same policy may have a negative impact, resulting in low benefit level during parental leave and a more disadvantaged situation in the labour market. There is no easy solution to a poor economic situation during parental leave, as generous benefits to non-working parents could provide incentives for women to stay out of the labour market altogether (Vikman 2013). Sweden represents a unique case study not only because the strong effort of combining work and family for all women and men, the high level of fertility and the presence of immigrants in the country, but it also enables detailed and sophisticated analysis based on the high-quality data derived from its population registers.

The study focuses on women because they are the main recipients of parental leave benefit, and because their situation in the labour market is affected the most by childbearing.

Immigrant women experience the most vulnerable labour market situation, and it is therefore important to consider their ability to access parental leave, which is the major Swedish policy for facilitating the combination of work and children. Knowledge about their use will contribute to the understanding of their inclusion and exclusion in welfare systems.

## **Background**

### *Parental Leave in Sweden*

Swedish parental leave benefit enables gender-equal sharing of the responsibility for children, but also includes an incentive for labour market work before having children through the earnings-related benefit. Benefits in Sweden are generally individual and based on residency, so the same basic rights apply to everyone. To get parental leave with an earnings-related benefit, the parent has to work at least eight months before childbirth. Parents who have done so receive 80 per cent of their prior normal earnings from the Swedish Social Insurance Agency, often supplemented with another 10 per cent from their employer by collective agreements. If a parent has no prior earnings, the benefit consists of a low flat rate of 20 euro a day. The flat rate was 6 euro a day throughout the 1990s and until 2002. The leave lasts 480 days but can be prolonged if a lower daily replacement is chosen. Each parent receives half of the leave but days can be transferred between parents, which is often done as mothers use most of the leave. However, two months are reserved for each parent and cannot be transferred; these are often called *daddy's quota*. Presently, mothers take about three quarters of all leave (76.3 per cent). Fathers' share of leave has steadily increased, not least in connection to the introduction of the reserved months (Duvander and Johansson 2012).

Although the leave lasts 480 days (approximately 16 months), it is used very differently by different parents. This is possible because the right to be absent from work due to childcare is more generous than the benefit days. Labour market legislation allows for parents to use 18 months of job-protected leave from the birth of a child, with or without benefit. In addition, leave use with benefit is job-protected at any time after that, for as long as the leave can be used (eight years). This means that it is possible to stretch the days of leave for a longer period by using unpaid days, and to use paid leave when the child is somewhat older. This is a common strategy and many parents, for instance, use days to extend holidays during the child's preschool years. This is done by both parents and the leave length for each parent depends on strategy of use as well as how leave is shared between parents. Thus, the child's period at home and the parent's labour market exit vary substantially (see for example Evertsson and Duvander 2010).

The variations in leave strategy are also based on knowledge of the system and family resources to meet parents' preferences; something that obviously varies between groups of parents. Surveys investigating parents' knowledge about parental leave rights have found indications that immigrants' knowledge of how to efficiently use the leave is low, which of course restricts flexibility in use (National Social Insurance Board 2003; Swedish Social Insurance Agency 2010).

Previous studies have shown that dramatic differences persist in the use of parental leave between immigrant and Swedish-born parents, even when the main socio-demographic characteristics are taken into account (Duvander 2010; Duvander and Eklund 2006). These differences are likely to be caused by difficulties in the labour market for the immigrant population. The connection between labour market situation and parental leave may take different routes. First, lower income will give a lower level of benefits, often the low flat rate. In

2011 the parental benefit at the low flat rate (for parents with low or no income) was claimed by over six per cent of women and two per cent of men, and was more common for immigrant parents. For example, among mothers from sub-Saharan Africa, 34 per cent received only flat rate benefits (Swedish Social Insurance Agency 2012). Immigrant parents also received a lower average compensation than those born in Sweden (Swedish Social Insurance Agency 2010). Second, if the parent is unemployed, he or she may be strongly encouraged to use up all the parental leave intensively before becoming eligible for unemployment benefits or other economic support (SOU 2012). This in turn restricts the possibility to use the system's flexibility. The labour market situation will also influence childbearing and thus, indirectly, leave use. Women from most immigrant origins receiving social assistance have lower first birth intensities compared to women in the labour force, contrary to the pattern of Swedish-born women (Andersson and Scott 2005).

### *Fertility of and Labour Market for Immigrants in Sweden*

A number of studies find that childbearing is the major transition of adulthood and that this transition is made once other stability is acquired, primarily economic stability. Indeed, in Sweden first births are strongly correlated with higher income for both women and men. It has often been concluded that labour market stability increases childbearing (Andersson 2000; Andersson and Scott 2005), while instability could have a negative effect on the propensity to become a first-time mother or father (Persson 2001). Chances of getting a job vary with the economic cycle, and the crisis in the 1990s is an example of when childbearing was postponed because of the negative labour market situation (see Andersson 2000; Oláh and Bernhardt 2008). Immigrants' labour market situation is studied extensively in Sweden (see for example

Bevelander 2000; Bevelander and Skyt Nielsen 2001; Rosholm et al. 2006; Scott 1999), and it has been found that (as in many countries) they are consistently disadvantaged (Edin et al. 2000, Grand et al. 2002), not least in the occupational hierarchy (Borjas 1992; Clark and Drinkwater 2002; Helgertz 2010). Regarding earnings performance, Andersson and Scott (2007) revealed marked inequalities between Swedish-born and immigrant men and women. Immigrants who arrived during the crisis of the 1990s were particularly disadvantaged. The most commonly cited reasons for immigrants' disadvantaged situation involve human capital, discrimination and lack of social networks (Behtoui and Neergaard 2010; Scott 1999).

It has long been noted that the experiences, benefits and costs of migration for women and men are different (Boyd 1984; Pedraza 1991). This holds for a variety of contexts (see for example Bevelander and Groenwveld 2010; Helgertz 2010; Le and Miller 2010; Rebhun 2008), and is often termed a double disadvantage for women (Boyd 1984). Immigrant women often carry the additional burden of migrating to a sex-segregated occupational structure, and are also ascribed lower status based on both gendered and ethnic roles. This is particularly relevant in a country such as Sweden characterized by strong sex segregation in the labour market (Brandén 2014). In addition, constraints connected to family responsibilities are likely to be exaggerated in a situation in which a strong social network is lacking (Raijman and Semyonov 1997). These disadvantages may also be increased by the response of the host country, including actors within the welfare system in Sweden, where immigrant fathers may be more encouraged and helped into employment than immigrant mothers (SOU 2012). The double disadvantage may well become a triple disadvantage for the most disadvantaged *geo-cultural* groups (Raijman and Semyonov 1997). Attainment of a stable labour market position before childbearing may thus be perceived as an impossible alternative for a substantial group of immigrant women. In turn, not



having had a labour market position before childbearing results in a low benefit level during parental leave and represents an additive and perhaps even multiplicative effect of the disadvantages. In sum, being an immigrant woman could lead to lower work compensation or unemployment, and this condition results in a lower benefit and less possibility to stretch the leave over a longer period. The long parental leave, and the fact of having become a parent with its accompanying responsibilities, make it even harder to attain stable employment. However, immigrants are also a highly heterogeneous group regarding their reasons for migration. The relationship between labour force participation and fertility may be different for various subgroups of immigrants. Mussino and Strozza (2012) showed that women migrating to Italy for family reasons have high childbearing intensities in the short run. The reason may be that immigrants' childbearing has been postponed by the immigration process and that immigrants are inclined to "catch up" the lost childbearing years during their first period in the new country (Andersson 2004; Milewski 2007; Parrado 2011). On the contrary female labour market migrants need more time to adjust and to decide whether to have children in the host country (Mussino and Strozza 2012). Focusing on the fertility of migrants in Sweden, previous studies have shown that the childbearing patterns of most immigrant groups adapt to those of the Swedish-born population with time in the host country (Andersson 2004; Andersson and Scott 2005). It also seems that for first- and second-generation immigrants the role of socio-economic factors in childbearing behaviour is similar to that in the Swedish-born population (Andersson and Scott 2005; 2007; Scott and Stanfors 2011). This is especially true for the propensity to have a first child, and the authors conclude that residency had "equalizing effects on social behaviour" (Andersson and Scott 2005; 2007).

Contrary to the myth of social tourism, immigrant women receiving social assistance (i.e., welfare benefits) had a 30-60 per cent lower risk of having a first child than did Swedish-born women, except for those born in Finland, Germany, and Thailand, all likely to live with a Swedish partner (Andersson and Scott 2005).

### **Research questions and hypotheses**

Based on previous studies establishing the association between economic considerations and the use of parental leave, we wish to investigate whether there are differences in the timing and intensity of the use of parental leave between immigrant and Swedish-born mothers, and whether these potential differences remain when labour market status is considered. Earlier studies lead to expectations of large differences in leave use depending on labour market situation (Bygren and Duvander 2006; Sundström and Duvander 2002). As the use of leave is flexible we are interested in both how much leave is used and when it is used. A common strategy is to extend the leave period by choosing a lower replacement level. Thus, few parental leave benefit days can mean either a short leave at regular benefit level or a long leave at low benefit. As the leave can be used until the child turns eight, many parents also use the leave to extend holidays later during the child's preschool years. To be able to use the flexibility in the leave system a parent needs to have the economic resources and a good negotiating position at work, as well as knowledge of the details of the system's regulations. We expect that there are persisting differences in the uptake of parental leave between Swedish-born and immigrant women, and strong variations by country of birth. We also expect that a great deal of these differences is connected to labour market situation. Immigrant women's disadvantage in the

labour market leads to a lower level of benefit, so when we control for the socio-economic characteristics the “effect” of the disadvantage is likely to diminish.

The results will be of importance as they will offer insight into how different dimensions of integration may be related to each other. They will also shed light on how the social policy, and social insurance in particular, affects immigrant integration. A long leave may be detrimental to one’s future labour market career (Albrecht et al, 1999; Evertsson and Duvander 2010), and a labour market attachment before childbearing is crucial for participation after becoming a parent (Rönsen and Sundström 2002). The study will thus also offer insight into the relationship between high employment and high fertility (Ellingsaeter 2009; Olah and Bernhardt, 2008) and whether this relationship needs to be scrutinized for different segments of society.

## **Data & methods**

To address our research question we use data from the population registers covering the entire population living in Sweden (STAR- Sweden over Time: Activities and Relations). Individuals enter the register by birth within the country or by immigration. Swedish population registers collect all demographic events (births, deaths, marriages, divorces, international migration, and internal mobility) by date of event. Individuals can be linked to their kin using a parent’s personal identification number. We also have access to yearly information on educational level, income, labour market attachment, and social insurance benefits, including parental leave benefit days.

The data are impressive, both the number of individuals included and the amount of information available, but for the purpose of this study there are two important limitations. First, the information on parental leave is annual-based, so parents of children born at different dates

are observed for different durations. Second, the information on parental leave days is related only to the parent and not to each child. It is thus not possible to disentangle leave per child, which is especially notable in Sweden with short birth intervals and long leave periods. We have considered these limitations when constructing our data set and in performing the analyses.

We focus on the mothers of children born in December during the years 1997 to 2004 to make sure the annual-based information on leave use is in accordance with the length of the child's life<sup>1</sup>. We select 23,992 mothers of parity one so as to not include leave use for previous children. We observe mothers' leave use for the month of December and for the subsequent three years as the great majority of leave days is taken during this time. We use statistical indicators and graphic measures to summarize the distribution of parental leave days by characteristics of the mother. The distribution of leave days is divided into *terciles*, indicating *few*, *medium* and *many days of leave*<sup>2</sup>, which is our dependent variable in multinomial regression models (Hosmer and Lemeshow, 2000). We simultaneously evaluate the risk of having *few* days or *many* days of parental leave, as compared to having a *medium* level, on an annual basis. To test our hypothesis that the use will vary over time since birth, we have constructed different models for each year since the birth. We study which mothers use the flexibility in the leave, and present the results for the first and second year after birth as leave use is largest during these period.

---

<sup>1</sup> There is no difference between December-children and all children regarding mother's age, but for children with a Swedish-born mother there seems to be a difference regarding educational level. There is a clear seasonal variation in fertility depending on mother's educational level, and Swedish-born mothers with children born in December have a significantly lower educational level than average. For immigrant mothers we do not find any differences between those having children in December and during the rest of the year. Therefore, immigrant mothers are more similar to Swedish-born mothers of December-children than other Swedish-born mothers. As our aim is to test the difference between these groups we believe that, if anything, our results would be even stronger if we could use children born during the whole year.

### *The independent variables*

Our main hypothesis is that the use of parental leave varies among immigrant and Swedish-born women. According to the practice of Statistics Sweden<sup>3</sup> (2002, Hagström 2009), the decomposition in duration of stay in Sweden is divided into zero to four years, five years or more, Swedish-born with two immigrant parents, Swedish-born with one Swedish-born and one immigrant parent, and Swedish-born with two Swedish-born parents. We use this combination, and in the model including only immigrant women we also use a variable including country of birth: born in another Nordic country; born in another European country; Oceania or America; born in any African country; born in Asia. We expect that immigrant women from developing societies, such as African (Rajiman and Semyonov 1997), experience most disadvantages in attempting to find employment, and they are consequently expected to use the majority of parental leave during the first year after birth. Our main interest is in how immigrant status in relation to labour market status influences mothers' parental leave use. *Labour-market activity* is measured by studying the main economic activity in the year of the child's birth, and is divided into six categories based on earnings, unemployment, and student status. To compare the different years under study (1997-2004) the income is calculated on the basis of prices in 1997 (Ohlsson-Wijk 2011). We control for other determinants of leave use, such as *education* divided into four groups by length of education: low (up to nine years of primary education); medium low (two years of secondary education); medium high (three years of secondary education); and lastly high, which is tertiary education. Other demographic and migratory variables included in the study are *calendar year* of birth, *age of the mother*, *stability of residence in Sweden*, and

---

<sup>2</sup> For the first year: 1<sup>st</sup> tercile between 1 and 210.7 days, 2<sup>nd</sup> tercile between 210.8 and 281 days, 3<sup>rd</sup> tercile 282 days and more. Second year: 1<sup>st</sup> tercile between 1 and 34 days, 2<sup>nd</sup> tercile between 35 and 112 days, 3<sup>rd</sup> tercile 113 days and more.

*continued childbearing* during the observation period. *Calendar years* were the single year of birth from 1997 to 2004. In this way we are able to consider the most recent cohort and test whether the pattern changed over the years. *Age of the mother* was considered a continuous variable. Residence stability was indicated by never having emigrated after immigration to Sweden, and unstable presence by the mother having left the country and then returned. During the observation period the mother may have had another child and the variable *continued childbearing* is codified into: no more children, a child during the first year, or a child during the second or third year.

### **Empirical observations**

The focus of the analyses is mothers with new-born children in December during the period 1997-2004 who are followed for three years from the birth of the child<sup>4</sup>. The box plot in Figure 1 describes the distribution of parental leave days in the two years following the birth. We find that in the year following the birth the distribution of leave days is more diverse among the immigrant mothers who have recently arrived in Sweden than among other groups. This group has the highest median of days used the first year. Mothers with both parents born in Sweden are most homogenous in their use, and use fewer days than all other groups. During the second year after the birth the pattern is inverse, i.e. women who have spent more time in Sweden use more days of parental leave than newly arrived women. Variation in used days is large in all groups.

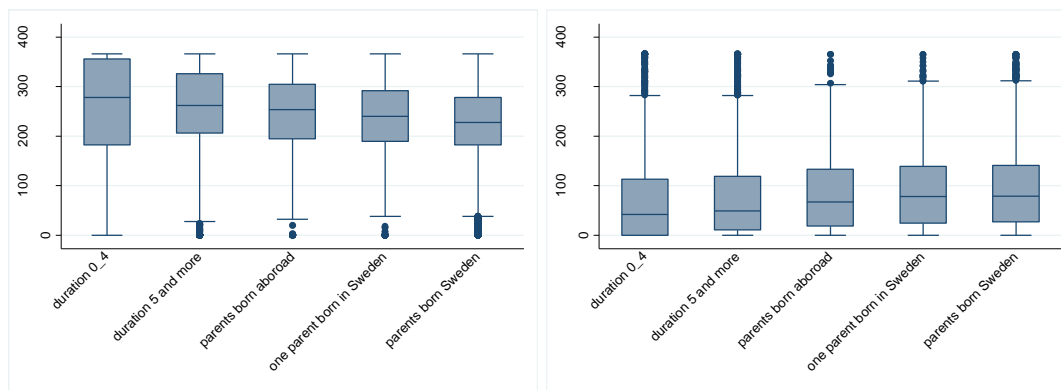
---

<sup>3</sup> In this study, in contrast to the guidelines, we do not distinguish for duration if at least one parent is Swedish-born.

**Figure 1: Number of Parental leave days one and two year after birth by immigrant background**

**a) Year+1**

**b) Year+2**



Source: Swedish administrative register data, compiled by the authors

Strong heterogeneity is also present when we consider the distribution by region of birth (Figure 2). Once again, during the first year it appears that Swedish-born women use few days of parental leave while during the second year they are the group that uses most days. The women with African origin use more days during the first year, while for the second year their use is more similar to that of other women born outside Scandinavia. Women born in Scandinavia display a pattern between those of the Swedish-born and immigrant women this could probably be associated also to the different reason of the residence permit. Obviously the reasons for migration is strongly associated with region of origin and a plausible underlying factor is that other Nordic women more often come for labour force participation while other immigrant women come to Sweden for family or humanitarian reason.

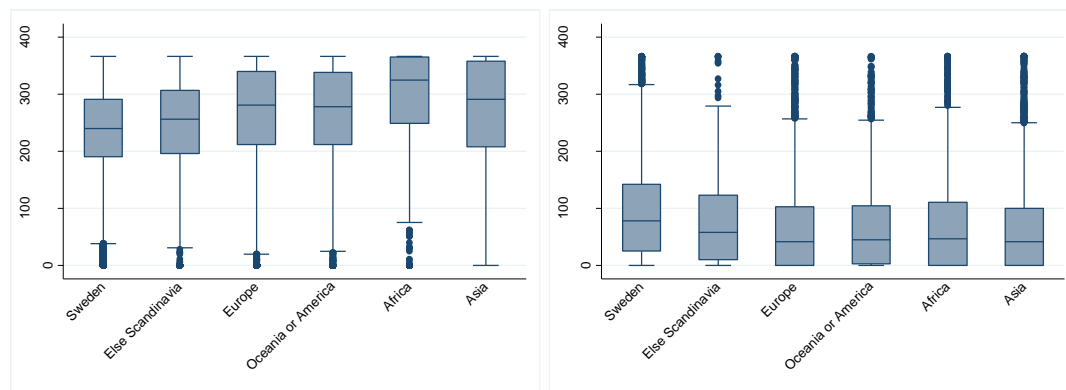
---

<sup>4</sup> In this section we will present the results of the different use of parental leave for the first (*year+1*) and the second

**Figure 2: Number of Parental leave days one and two year after birth by country of birth**

**a) Year+1**

**b) Year+2**



Source: Swedish administrative register data, compiled by the authors

To further analyse the leave patterns we will now present multinomial logistic regression models predicting the risk of having few or many parental leave days versus a medium number of days when we control for duration of residency in Sweden for all women, as well as the country of birth for immigrant women. To come up with a final model we use a stepwise procedure, where inclusion of labour market status is the most important step. We use mothers with two Swedish-born parents as reference category throughout the analyses. Considering the first year and the propensity to use few days, the basic model with no controls indicate that immigrant mothers who have spent a longer time in Sweden and the second generation have a lower risk of using few days compared to the mothers with Swedish-born parents (Table 1). On the contrary, the newly arrived immigrant mothers have a higher risk of taking few days. When we control for socio-demographic and economic characteristics, particularly labour market status, the higher risk of few days among newly arrived immigrant mothers disappears. We believe that the higher risk of using few days is associated with limited access to the system, and

---

(*year+2*) year after the birth. The results for the year (*y*) and three years after the birth (*year+3*) are consistent with



lack of knowledge. Among the Swedish-born mothers the risk of taking few days is more likely linked to household economic resources more than a situation of disadvantage. In couples with high household income the woman may be enabled to spend more time at home unpaid, without using many leave days. For the immigrant women, during the second year (*year+2*), the higher risk of few leave days when we control for the socio-demographic and economic status is still persistent. Using few days when the child is over one year old may be due to few remaining parental leave days or the labour market situation restricting the possibility to use longer leave.

**Table 1 Multinomial logistic regression- Null and Full model: Use of Parental Leave short vs medium**

Few	Year +1				Year +2			
	Basic Model		Full Model		Basic Model		Full Model	
	RRR	sign	RRR	sign	RRR	sign	RRR	sign
I duration in Sweden 0-4	1.60	0.000	0.82	0.027	2.00	0.000	1.51	0.000
I duration in Sweden 5 and more years	0.83	0.004	0.76	0.000	1.62	0.000	1.44	0.000
SB with both parents born abroad	0.90	0.255	0.93	0.435	1.35	0.000	1.26	0.006
With one parent born in Sweden and one parent not	0.84	0.003	0.83	0.002	1.05	0.452	0.99	0.885
<i>With two parents born in Sweden</i>	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	

Note: Full Model controls for Age, Stability of the presence, Educational level, Labor market, Consequent children, and year of birth. See table

A2 Source: Swedish administrative register data, compiled by the authors

When we consider the risk of taking many parental leave days (Table 2), all immigrant women have a higher risk during the first year (*year+1*). When we control for the socio-demographic and economic characteristics, the differences are reduced but remain statistically significant. The risk of many leave days the first year is lower for women who have lived longer in Sweden. Taking many days in the first year indicates a higher risk of taking few days during the second year (Table 1). Even if the variation in leave use is larger among immigrant mothers,

our conclusions but are not presented because of space limitations.

most of them use leave more intensively during the first year following childbirth and then fewer days compared to Swedish-born mothers. In fact, in the second year following birth it is indicated that immigrant mothers limit their use of leave while Swedish-born mothers use leave during a longer period.

**Table 2 Multinomial logistic regression- Null model and full model: Use of Parental Leave long vs medium**

Many	Year +1				Year +2			
	Basic Model		Full Model		Basic Model		Full Model	
	RRR	sign	RRR	sign	RRR	sign	RRR	sign
I duration in Sweden 0-4	3.72	0.000	1.92	0.000	0.89	0.083	0.76	0.003
I duration in Sweden 5 and more years	2.04	0.000	1.65	0.000	0.85	0.008	0.80	0.001
SB with both parents born abroad	1.59	0.000	1.30	0.002	0.97	0.768	0.96	0.696
With one parent born in Sweden and one parent not	1.16	0.013	1.04	0.498	0.98	0.754	0.97	0.661
<i>With two parents born in Sweden</i>	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	

Source: Swedish administrative register data, compiled by the authors

The full models with all control variables are found in the appendix (Table A2). Here we want to highlight how women with low income concentrate their leave days to the first year. We interpret this finding in light of their disadvantage in the labour market and thus lower parental leave benefit. Also, women with high income take fewer days. When we consider the risk of taking few days it is clear that the differences between immigrant and Swedish-born mothers are related to their different socio-economic statuses, and particularly the stepwise procedure shows the importance of labour market position. When we consider the risk of taking many days the results do not change by inclusion of economic and socio-demographic variables to the same extent. The difference between groups can be partly caused by lack of knowledge of parental leave regulations, especially the different options for flexibility. Support for this interpretation is

found in that older cohorts of immigrants and women with at least one Swedish-born parent showed more similarity to Swedish-born mothers than to newly arrived immigrants.

We are now interested in whether mothers of different immigrant origins use parental leave differently. To study this we exclude Swedish-born women as well as those with one Swedish parent (Table 3). Focusing on the region of birth it appears that mothers with African origin use the leave most intensively the first year, and consequently less during the second. When we look at the risk of taking few days no significant difference between the groups emerge. In these models time spent in Sweden does not appear to influence the use of parental leave during the first year, while in the second year the immigrant women who have spent longer time in Sweden appear to take more days of parental leave, thus showing signs of greater tendency towards more flexible use of parental leave.

Comparing between tables, the results indicate a greater difference between immigrant and Swedish-born women than between different birth origins (Tables 1 and 2 vs. Table A2). When we consider region of birth and control for socio-economic status, there are no significant differences between the country-group in the first or second year regarding the propensity to take few days. There is still strong heterogeneity in the risk of taking many days among immigrants from different origin. The age variable confirms that increasing age is associated with lower leave use in the first year after birth and higher leave use in the second year. In the model of only immigrants the relative risk of taking few days is higher for those unemployed before giving a birth, in accordance with our hypothesis that they are at disadvantage in the labour market, and consequently not entitled to the earnings-related benefit level.

**Table 3 Multinomial logistic regression. Only Immigrant women: Use of Parental Leave**

	Year+ 1				Year + 2			
	Few		Many		Few		Many	
Duration in Sweden 0-4	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Duration in Sweden 5 and more years	0.87	0.244	0.88	0.228	0.89	0.239	1.24	0.088
Else Nordic Countries	1.22	0.369	0.47	0.000	0.89	0.512	1.24	0.331
Else Europa	1.03	0.866	0.66	0.009	1.05	0.720	1.47	0.036
America and Oceania	1.10	0.657	0.67	0.029	1.10	0.554	1.51	0.051
Africa	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Asia	1.20	0.334	0.73	0.044	1.06	0.698	1.36	0.085
Age of the mother at delivery	1.03	0.002	0.99	0.507	0.99	0.252	1.02	0.091
Stability of the presence: never emigrated	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Unstable	2.02	0.031	1.86	0.048	2.31	0.023	2.22	0.067
Educational level: low	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Medium low	0.74	0.109	0.47	0.000	0.83	0.189	0.78	0.162
Medium high	0.89	0.526	0.62	0.001	1.03	0.812	0.89	0.480
High	1.57	0.007	0.52	0.000	1.16	0.236	0.82	0.225
Labor market: student	2.94	0.000	1.61	0.003	1.77	0.000	0.70	0.088
Unemployed	1.93	0.001	1.61	0.002	1.23	0.173	0.72	0.081
Low income	1.40	0.134	1.24	0.228	1.26	0.203	0.76	0.236
Medium income	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
High income	1.40	0.049	0.76	0.060	0.91	0.528	0.94	0.740
Non participant	3.47	0.000	2.33	0.000	1.36	0.035	0.79	0.179
Subsequent children: no child	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
After 1 year	2.53	0.111	1.60	0.406	1.26	0.780	41.76	0.000
After 2 year					0.30	0.000	9.55	0.000
Year of Birth: 1997	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
1998	1.06	0.784	1.05	0.774	1.12	0.486	1.15	0.511
1999	0.86	0.462	0.69	0.037	0.97	0.830	1.14	0.529
2000	1.00	0.981	0.67	0.023	0.92	0.617	1.12	0.588
2001	1.37	0.114	0.78	0.174	1.02	0.912	1.08	0.706
2002	1.14	0.506	0.77	0.127	0.77	0.101	1.05	0.805
2003	0.80	0.237	0.56	0.001	1.03	0.845	1.30	0.187
2004	1.09	0.647	0.74	0.068	0.86	0.319	0.86	0.451
Constant	0.17	0.000	5.57	0.000	1.82	0.061	0.20	0.000
R2	0.0613				0.1495			

Source: Swedish administrative register data, compiled by the authors

## Discussion

The family policy in Sweden is related to both labour market work and childbearing patterns, mainly through the strong encouragement to combine the two, and indeed most mothers

and fathers in Sweden work. The strong incentive through the parental leave system to work before becoming a parent is related to a number of advantages, such as a more gender equal labour market and lower child poverty (Ferrarini and Duvander 2010). However, for women for whom stable employment is not attainable before childbearing the same system may have negative implications. This study focuses on those who have the most difficulty attaining employment in the Swedish labour market; that is, immigrant mothers.

We find that immigrant mothers use parental leave more intensively than Swedish-born mothers. While Swedish-born mothers use a large share of the parental leave benefit days the second year after childbirth, immigrant mothers use a larger share of the leave benefit days the first year. However, there is great variation in the immigrant group, and longer residency in Sweden makes the pattern similar to that of Swedish-born mothers, showing some signs of adaptation. When labour market status is controlled for the differences diminish, especially for the newly arrived immigrants. When differences between immigrant mothers are analysed, we find that those who have been in Sweden for more than five years use more leave during the second year after childbirth, similarly to Swedish-born mothers. Mothers with African origin use the leave most intensively the first year. We believe that being new in a country and being especially disadvantaged in the labour market, as are mothers with African origin, may lead to a multiplicative effect of disadvantage. Here, the long leave may be an obstacle to find stable employment. These women may thus end up in a circle of marginalization.

As the Swedish women who had children in December seem to be somehow similar to immigrants, with a slightly lower level of education, we conclude that our results of differences between immigrant and Swedish born mothers may be even stronger than our analysis indicate.

There are other examples of immigrant women showing a different response in the use of family policy in Sweden that may raise further concern. One specific example is the introduction of the speed premium in the 1980s. The implication of this reform was that women in the labour force who reduced their hours after the first child had an incentive to shorten their birth intervals, and this caused a dramatic decrease in birth intervals (Andersson, Hoem and Duvander 2006). Immigrant women did not change their behaviour in the same way, probably because they had less to gain from the speed-premium, which could mainly be used efficiently with a relatively high income before the first birth. Other studies have also shown that newly arrived immigrant mothers use parental leave benefits and that even if it delays labour market entry, leave use only partially explain such entries (Vikman 2013). The present study focusing on the different use of parental leave shows a different response to policy among immigrant; immigrant women are less able to exploit the flexibility of the parental leave benefit. But it also shows that some of the disadvantages are clearly linked to the socio-demographic and economic characteristics of the mother, especially her labour market position.

It seems that Swedish family policy faces new challenges with a changing population and more heterogeneous behaviour. Even when labour market status is considered, immigrant women have more concentrated leave during the first year. Consequently, this study suggests the need of interventions focusing on information regarding rights and benefits to all parents in Sweden. Even more central, as the labour market conditions are found to be crucial for leave use, attention must be drawn not just to the close connection between labour market and family policy, but more specifically to the centrality of the interaction between these two policy areas; our results show that when immigrants are not discriminated in the labour market they are not disadvantaged in the use of parental leave. This is especially important for groups who run the

risk of marginalization, such as newly arrived immigrant parents. Huge efforts in policies directed to labor market integration and to the family have been done but maybe a final step is missing: the integration of the two.

### **Acknowledgements**

This study was partly funded by the Swedish Research Council (Vetenskapsrådet) via the Swedish Initiative for Research on Microdata in the Social and Medical Sciences (SIMSAM), grant registration number 839-2008-7495, and partly by the Swedish Research Council via the Stockholm University Linnaeus Center for Social Policy and Family Dynamics in Europe (SPaDE), grant 349-2007-8701.

### **References**

- Albrecht, J.W., Edin, P-A., Sundström, M. and Vroman, S.B. 1999. Career Interruptions and Subsequent Earnings: A Reexamination Using Swedish Data. *Journal of Human Resources*, 43: 294-311.
- Andersson, G. 2000. The impact of labor-force participation on childbearing behaviour: Pro-cyclical fertility in Sweden during the 1980s and the 1990s. *European Journal of Population* 16(4): 293-333. doi:10.1023/ A:1006454909642.
- Andersson, G. 2004. Childbearing after migration: Fertility patterns of foreign-born women in Sweden. *International Migration Review*, 38, 747-774.
- Andersson, G. and Scott, K. 2005. Labour-market status and first-time parenthood: The experience of immigrant women in Sweden, 1981-97. *Population Studies* 59: 21-38.

- Andersson G., Hoem J., Duvander A.Z. 2006. Social differentials in speed-premium effects in childbearing in Sweden. *Demographic Research*, 14: 51-70
- Andersson, G. and Scott, K. 2007. Childbearing dynamics of couples in a universalistic welfare state: The role of labor-market status, country of origin, and gender. *Demographic Research*, 17: 897-938.
- Behtoui A. and Neergaard A. 2010. Social capital and wage disadvantages among immigrant workers, *Work Employment Society* 24: 761-779, DOI: 10.1177/0950017010380640
- Bevelander, P. 2000. *Immigrant Employment Integration and Structural Change in Sweden, 1970-1995*. Södertälje: Almqvist and Wiksell International.
- Bevelander, P. and Skyt Nielsen, H. 2001. Declining employment success of immigrant males in Sweden: Observed or unobserved characteristics? *Journal of Population Economics* 14(3): 455-471. doi:10.1007/s001480000036.
- Bevelander, P. and Groeneveld, S. 2010. How many hours do you have to work to be integrated? Full-time and part-time employment of the native and ethnic minority women in the Netherlands. *International Migration*, 50: 118-131.
- Borjas GJ. 1992. Ethnic Capital and Intergenerational Mobility. *Quarterly Journal of Economics* 107: 123–50.
- Borjas, G. J. and Trejo, S. J. 1991. Immigrant participation in the welfare system. *Industrial and Labor Relations Review*, 44(2):195–211.
- Borjas, G. J. and Trejo, S. J. 1993. National origin and immigrant welfare reciprocity. *Journal of Public Economics*, 50(3):325–344.
- Boyd, M. 1984. At A disadvantage: The occupational attainment of foreign-born women in Canada. *International Migration Review*, 18, 1091-120.



- Bygren, M. and Duvander, A. 2006. Parents' Workplace Situation and Fathers' Parental Leave Use. *Journal of Marriage and the Family*, 68:363-372.
- Brandem, M. 2014. Gender Migration Patterns within a Sex Segregated Labor Market. Stockholm University Demography Unit- Dissertation Series 10
- Clark K, Drinkwater S. 2002. Enclaves, Neighbourhood Effects and Employment Outcomes: Ethnic Minorities in England and Wales. *Journal of Population Economics* 13: 5–30.
- Duvander, A., Ferrarini, T. and Thalberg, S. 2005. Swedish parental leave and gender equality. Achievements and reform challenges in a European perspective. *Arbetsrapport/Insitutet for Framtidsstudier: 11*. Stockholm: Institute for Future Studies.
- Duvander, A., Eklund, S. 2006. Utrikesfödda och svenskfödda föräldrars föräldrapenninganvändande [Foreign born and Swedish born parents' parental leave use] Pp.33-68 in P. de los Reyes (Ed), *Om välfärdens gränser och det villkorade medborgarskapet*. SOU 2006:37. Stockholm: Fritzes.
- Duvander, A.Z. 2010. Immigrants' use of parental leave in Sweden in L. B Knudsen and A Linhardt Olsen (Eds), *Our Demographic Future – a Challenge. On the Need for Demographic Analyses*. *Scandinavian Population Studies*, 14: 203-224.
- Duvander, A., Olsson, S. 2012. *Nyanlända invandrares användning av föräldrapenning* [Newly arrived immigrants use of parental leave] In *Förmån och fälla – nyanländas uttag av föräldrapenning* SOU 2012:9. Stockholm: Fritzes.
- Duvander, A and M. Johansson 2012. What are the effects of reforms promoting fathers' parental leave use? *Journal of European Social Policy* 22 (3):319-330

- Edin, P.A. LaLonde, R. J. and O. Åslund 2000. Emigration of immigrants and measures of immigrant assimilation: Evidence from Sweden. *Swedish Economic Policy Review* 7 163-204
- Ellingsaeter, L. 2009. Leave policy in the Nordic welfare states: a 'recipe' for high employment/high fertility? *Community, Work & Family*. 12(1): 1-19
- Evertsson, M. and Duvander, A. 2010. Parental Leave - Possibility or Trap? Does Family Leave Length Effect Swedish Women's Labour Market Opportunities? *European Sociological Review*, 27 (4):435-450.
- Ferrarini, T and A. Duvander 2010. Earner-Career Model at the Cross-roads: Reforms and Outcomes of Sweden's Family Policy in Comparative Perspective, *International Journal of Health Services* 40(3):373-398.
- Grand, C. I. and Szulkin, R. (2002), Permanent Disadvantage or Gradual Integration: Explaining the Immigrant-Native Earnings Gap in Sweden . *Labour*, 16: 37-64. doi: 10.1111/1467-9914.00186
- Hagström M. 2009. *Country Report Sweden*, PROMINSTAT
- Helgertz, J. 2010. Thou shalt not pass? Examining the existence of an immigrant glass ceiling in Sweden, 1970-1990. *Demographic Research*: 24: 1-44
- Hoem, B. 1993. The compatibility of employment and childbearing in contemporary Sweden. *Acta Sociologica* 36: 101-120. doi:10.1177/000169939303600202.
- Hosmer D.W., Lemeshow S. 2000. *Applied logistic regression*, Wiley-Interscience, New York.
- Le, A. T. and Miller, P.W. 2010. Glass ceiling and double disadvantage effects: women in the US labour market. *Applied Economics*, 42: 603-613.

- Lundström K.E. and Andersson G. 2012. Labor market status, migrant status, and first childbearing in Sweden *Demographic Research*, 27(25): 719-742.
- Milewski, Nadja. 2007. First child of immigrant workers and their descendants in West Germany: interrelations of events, disruption, or adaptation? *Demographic Research* 17(29): 859-896.
- Mussino, E., Strozza, S. (2012). The fertility of foreign immigrants after their arrival: The Italian case. *Demographic Research*, 26(4), 99-130.
- National Social Insurance Board. 2003. *Mamma vet bäst. En kunskapsmätning om föräldrapenning och föräldraledighet* [Mother knows best. An evaluation of knowledge on parental leave benefits], RFV Analyserar 2003:19, Riksförsäkringsverket, Stockholm.
- Oláh, Livia Sz. and Eva M. Bernhardt 2008: "Sweden: Combining childbearing and gender equality." *Demographic Research* 19:1105-1144, Special Collection 7: Childbearing Trends and Policies in Europe, edited by Tomas Frejka et al.,
- Ohlsson-Wijk S. 2011. Sweden's marriage revival: An analysis of the new-millennium switch from long-term decline to increasing popularity, *Population Studies*, 65:2, 183-200
- Pedraza, S. 1991. Women and migration: The social consequences of gender. *Annual Review of Sociology*, 17: 303-325.
- Parrado, Emilio, 2011. How high is Hispanic/Mexican fertility in the United States? Immigration and tempo considerations. *Demography* 48(3): 1059-1080.
- Persson, L. (2001). *Arbetsmarknadsstatus och fruktsamhet. Påverkar anknytningen till arbetsmarknaden kvinnors och mäns barnafödande?* [Labour market status and fertility – Does the connection to the labor market affect women's and men's childbearing?] Stockholm: Statistiska centralbyrån. (Demografiska rapporter 2001: 2).

- Rajiman, R. And Semyonov, M. 1997. Gender, ethnicity, and immigration. Double disadvantage and triple disadvantage among recent immigrant women in the Israeli labor market. *Gender & Society*, 11(1): 108-125.
- Rebhun, U. (2008). A double disadvantage? Immigration, gender, and employment status in Israel. *European Journal of Population*, 24: 87-113.
- Rønsen, M. and M. Sundström (2002) "Family policy and after-birth employment among new mothers – A comparison of Finland, Norway and Sweden." *European Journal of Population* 18:121-152
- Rosholm, M., Roed, M., Schøne, P. 2006. Are new work practices and new technologies biased against immigrant workers? IZA Discussion Papers, No. 2135
- SCB 2008. *Integration – en beskrivning av läget i Sverige* [Integration: An overview of the situation in Sweden]. Stockholm: Statistiska centralbyrån. (Integration: Rapport 1)
- SCB 2009. *Integration – utrikes födda på arbetsmarknaden* [Integration: Foreign-born at the labour market]. Stockholm: Statistiska centralbyrån. (Integration: Rapport 2)
- Scott, K. 1999. *The Immigrant Experience: Changing Employment and Income Patterns in Sweden, 1970-1993*. Lund: Lund University Press.
- Scott, K. and Stanfors, M. 2011. The transition to parenthood among the second generation: Evidence from Sweden, 1990-2005. *Advances in Life Course Research* 16(4): 190-204. doi:10.1016/j.alcr.2011.09.003
- Sundström, M. and Duvander, A. 2002. Gender division of child care and the sharing of parental leave among new parents in Sweden. *European Sociological Review*. 18(4):433-447.
- Statistics Sweden 2002. *Statistics on persons with foreign background, Guidelines and recommendations*, MIS 2002:3, SCB

Statistics Sweden 2008. Integration. A description of today's Sweden. *Integration Rapport 1*. Stockholm, Statistics Sweden.

Statistics Sweden 2010. Betydelsen av tid i Sverige för fruktsamheten. *Bakgrundsmaterial för Demografi, Barn och Familj* 2012:1. Stockholm, Statistics Sweden.

Statistics Sweden 2012. Statistisk årsbok [Annual yearbook]. see [www.scb.se](http://www.scb.se)

Swedish Social Insurance Agency 2010. *Social Insurance in Figures 2010*. Stockholm, Swedish Social Insurance Agency.

Vikman U. 2013. Paid parental leave to immigrants: An obstacle to labor market entrance? *Working paper* 2013:4, IFAU.

## Appendix Table A1: Frequencies

	Descriptive time y
<b>Immigrant background:</b> duration in Sweden 0-4	1,968
Duration in Sweden 5 and more years	2,042
SB with both parents born abroad	906
SB with one parent born in Sweden and one parent not	1,886
SB with two parents born in Sweden	17,158
missing	32
<b>Stability of the presence:</b> never emigrated	23,596
unstable	396
<b>Educational level:</b> low	2,750
medium low	4,100
medium high	6,775
high	9,570
missing	797
<b>Labor market:</b> student	2,575
unemployed	2,977
low income	1,235
medium income	5,425
high income	9,396
non participant	2,384
<b>Subsequent children:</b> no child	19,305
after 1 year	83
after 2 or 3 year	4,604
<b>Year of Birth:</b> 1997	2,663
1998	2,645
1999	2,889
2000	2,886
2001	2,965
2002	3,214
2003	3,295
2004	3,435
Total	23,992

Source: Swedish administrative register data, compiled by the authors

**Table A2 Multinomial logistic regression. Complete model: Use of Parental Leave**

	Year+ 1				Year + 2			
	Few		Many		Few		Many	
	RRR	sign	RRR	sign	RRR	sign	RRR	sign
Duration in Sweden 0-4	0.82	0.027	1.92	0.000	1.51	0.000	0.76	0.003
Duration in Sweden 5 and more years	0.76	0.000	1.65	0.000	1.44	0.000	0.80	0.001
SB with both parents born abroad	0.93	0.435	1.30	0.002	1.26	0.006	0.96	0.696
With one parent born in Sweden and one parent not	0.83	0.002	1.04	0.498	0.99	0.885	0.97	0.661
With two parents born in Sweden	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Age of the mother at delivery	1.04	0.000	0.97	0.000	0.98	0.000	1.04	0.000
Stability of the presence: never emigrated	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Unstable	1.43	0.047	1.36	0.097	1.55	0.039	1.12	0.655
Educational level: low	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
Medium low	0.96	0.578	0.62	0.000	0.81	0.001	1.12	0.114
Medium high	1.10	0.166	0.58	0.000	0.85	0.006	1.12	0.099
High	1.74	0.000	0.38	0.000	0.92	0.155	0.94	0.358
Labor market: student	1.57	0.000	1.39	0.000	1.78	0.000	0.66	0.000
Unemployed	1.09	0.164	1.45	0.000	1.63	0.000	0.78	0.000
Low income	1.23	0.020	1.35	0.000	1.43	0.000	0.73	0.000
Medium income	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
High income	1.12	0.012	0.68	0.000	0.96	0.444	0.79	0.000
Non participant	3.06	0.000	2.37	0.000	1.88	0.000	0.68	0.000
Subsequent children: no child	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
After 1 year	1.39	0.292	1.24	0.482	1.32	0.691	52.75	0.000
After 2 or 3 year	-		-		0.22	0.000	6.07	0.000
Year of Birth: 1997	<i>1</i>		<i>1</i>		<i>1</i>		<i>1</i>	
1998	1.15	0.065	1.02	0.790	1.00	0.976	0.97	0.706
1999	1.17	0.030	0.92	0.223	0.99	0.920	1.00	0.996
2000	1.35	0.000	0.82	0.004	0.94	0.330	1.02	0.799
2001	1.71	0.000	0.79	0.001	0.92	0.250	1.15	0.056
2002	1.45	0.000	0.76	0.000	0.90	0.124	1.07	0.349
2003	1.57	0.000	0.78	0.000	0.98	0.809	0.86	0.033
2004	1.65	0.000	0.74	0.000	1.01	0.899	0.81	0.004
Constant	0.16	0.000	3.80	0.000	1.45	0.002	0.27	0.000
R2	0.0822				0.1161			

Source: Swedish administrative register data, compiled by the authors