Do leave policies impact fertility?

The case of immigrants from low-fertility countries in Sweden

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Abstract

Fertility behaviour is strongly influenced by social and cultural norms, as well as welfare policies such as parental leave. Here, I study the fertility of immigrants from low-fertility countries in Sweden, and estimate the effect of parental leave uptake on their fertility. Sweden is an important case as its welfare regime provides support for women and men to combine childbearing and employment, which has been positively linked to continued childbearing. Additionally, Sweden's welfare regime is typically regarded as universalistic: everyone residing in this country is entitled to the same social rights. Thus, the focus on Sweden and immigrants from low-fertility settings will identify patterns for women who moved to a context where their fertility desires can be more easily realized than in their country of origin. I found signs of adaptation among immigrants from low-fertility countries in Sweden and that, for some groups, extensive parental leave uptake sped up this process.

Keywords: low fertility, immigrant, parental leave, Sweden, event history analysis, adaptation

Introduction

At the beginning of the 1990s, the period Total Fertility Rate (TFR) dropped dramatically in many Central, Eastern and Southern European countries, reaching values below 1.3 ('lowest-low fertility'; see Kohler et al. 2002). For example, in 1995 Italy had a negative peak of 1.19 child per woman. Different reasons were associated with this decrease and the persistence of these low levels. In Southern Europe, for example, traditional family patterns as well as low female employment and high unemployment among young adults played an important role (e.g., Billari & Kohler 2004; Billari 2008). Meanwhile, in Central and Eastern Europe, the reasons were mainly economic and related to the collapse of state socialism around that time (e.g., Sobotka 2004; Perelli-Harris, 2005). In addition, in all the countries, the lack of reconciliation between work and family was considered a key factor (Neyer & Andersson 2008).

On the other hand, Sweden, despite some cyclical fluctuation, has maintained a relatively higher level[1], and the completed fertility of cohorts of Swedish women has remained remarkably stable at a level of just under two children per woman (Andersson et al. 2009; Jalovaara et al. 2019). Moreover, Sweden has a long history of offering parental leave – to both mothers and fathers – with the aim of reconciling family and working life. Taken together, these factors make Sweden one of the most supportive environments for all women to have and raise children, irrespective of their migration background, a fact that is well-established in the comparative literature on European fertility (Chesnais 1996; Frejka & Sobotka 2008; Neyer & Andersson 2008). Despite not having an explicit *pronatalist* goal, the Swedish system is based on the assumption that gender equality and balance in family-working life might have a positive effect on fertility and indirectly allow the achievement of the ideal family size (Andersson, 2005; Duvander & Andersson 2006).

This chapter focuses on the possible impact of the family-friendly welfare state of Sweden on immigrants' fertility, allowing us to study how immigrants adapt to their new society and how different policy provisions may influence the childbearing behaviour of different immigrant groups. Previous studies have shown that native-born Swedes tend to adjust their childbearing behavior and parental leave uptake in reaction to different reforms in Swedish family policies (e.g. Andersson, Hoem & Duvander 2006). In contrast, there is little documentation on how

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[1] In 2013, the year that we use as a reference in this study (see methodological section), we observed a period TFR of 1.9 in Sweden; in 2020 we observed a value of 1.7. Both TFR values are below 2.1, which represents the average number of children each woman would need for allow the population to replaces itself. In the context of developed societies the level are still comparably high (Andersson 2005).

immigrants in Sweden tend to react to family policy change. An exception to this is Andersson, Hoem, and Duvander (2006), who found that native-born women shortened their birth intervals whereas immigrant women did not change their behavior in the same way in response to the so-called "speed premium[2]".

In particular, this study focuses on immigrants to Sweden from low(er)-fertility countries, looking at a possible adaptation "from below", meaning a possible fertility increase over time among migrants in the destination country. Despite the methodological advances in studying the adaptation of immigrants from lower-fertility countries, this is not common in the literature (Mussino, Wilson & Andersson 2020); e.g., most of the literature focus on migration from high- to low(er)- fertility countries. In that case, a convergence (adaptation) in fertility behaviours would appear as a result of a reduction of fertility among immigrants[3]. However, immigrants from high-fertility countries might arrive having already had more children than the destination's norm (Tønnesen & Mussino 2020).

Furthermore, as in this case origin and destination contexts differ greatly in terms of institutional setting (e.g. Hobson & Oláh 2006; Matysiak 2009) and fertility behaviors (e.g. Eurostat 2021) but not fertility preferences (e.g. Testa 2012; Sobotka & Beaujouan 2014), this paper will contribute to the discussion suggesting that policies facilitating the combination of family life and labor-market participation for women result in higher fertility rates (Kreyenfeld 2004; McDonald 2013; Olah 2011).

This chapter places itself in the literature of whether family policies can have an impact on childbearing behaviour, focusing on migrants that come from lower-fertility countries than Sweden. Examining how women of migrant background behave in different institutional settings may thus provide deeper insights into how policy influences fertility.

From background to research questions

Many hypotheses, which are not mutually exclusive, have been used to explain and predict the fertility of immigrants and their descendants: adaptation, socialization, interrelation,

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[2] Parental leave is earnings related, and is estimated based on one's salary prior to childbearing. In this sense, having more than one child within a short period could temporarily reduce the parents' working hours and consequently affect their income. For this reason, in the 1980s Sweden introduced the so-called speed premium, ensuring that for births with up to 24 months' spacing (since 1986, 30 months) the earnings-based benefits are based on the parents' salaries prior to the birth of their previous child, if higher than their current income.

[3] See next section for an overview

disruption, and selection (e.g. Kulu & González-Ferrer 2014; Kulu, Milewski, Hannemann, & Mikolai 2019). However, in this chapter we focus mainly on the first two (adaptation vs socialization) and the role of family policies in affecting fertility behaviors. The hypothesis of adaptation predicts that fertility behaviors change over time or across generations, either in response to the institutional destination context or driven by shifting norms, resulting in fertility behaviors similar to the "norm" of the destination country (Andersson & Scott 2005; Milewski 2010). Previous research on the Swedish context suggests that after six years in the country, immigrant women's risk of having a first child tends to be similar to that of Swedish-born women (Andresson 2004). Andersson and Scott (2005, 2007) also found that socioeconomic factors, such a labor-market participation, play a similar role in relation to fertility for Swedish- and foreign-born women alike. However, previous research has looked mainly at migrants from countries with relatively higher fertility than Sweden, and do not test the effect of family policies on "speeding up" this convergence. On the contrary, the socialization hypothesis assumes that fertility behaviors mainly depend on exposure to norms and behavior during childhood, resulting in migrants having fertility behaviors similar to those in their country of origin (e.g. Milewski 2010). This also explains why different migrant groups in the same destination country exhibit different fertility levels (e.g. Andersson 2004; Mussino & Cantalini 2021).

Sweden as a destination country is an interesting example, not only because it attracts migrants from relatively lower-fertility countries and has high-quality (population registers) data but also because it is a perfect country in which to test the adaptation vs socialization hypotheses and the role of family policies in affecting fertility behaviors, for two reasons: Sweden formulated a multicultural immigrant policy in the mid-1970s whereby equality and freedom of choice are promoted and immigrants can maintain their own distinct cultural identity (Borevi 2012); and Sweden's welfare regime is typically seen as universalistic: everyone residing in this country is entitled to the same social rights. Social policies support women's labor force participation and promote gender equality. Opportunities to work flexible hours, uptake of parental leave, and the availability of a publicly financed childcare system facilitate both women's labor-market involvement and fertility. Further, considering Sweden's generous and earnings-based parental leave system, one would expect strong incentives for immigrants (as well as non-immigrants) to reach the desired fertility.

Parental leave in Sweden is based on prior earnings, thus incentivizing labor-market participation before having children. Parents receive 480 days of paid leave per child to share,

of which 390 are paid at 80% of previous earnings (often topped up with 10% from their employer) and 90 are paid at a flat rate (today approximately 25 Euro a day). If a parent has not worked in the previous eight months, the benefit consists of a low flat rate (Mussino & Duvander 2016). While most women in Sweden take extensive parental leave (i.e. most of it), three months are reserved for each parent: the so-called Daddy Quota. The system is quite flexible, and a long or short parental leave uptake might reflect parents' knowledge of the system as well as family resources to meet the parents' preferences or a stronger career orientation (Duvander & Andersson 2006, National Social Insurance Board 2003). This also results in extensive variations in leave strategy between mothers from different origin countries. For example, previous studies have shown that migrants use more parental leave benefit in the first year after their child's birth but then fewer in the second year (intensively), compared to Swedish mothers that keep larger part of the leave also for the following years (extensively). However, the differences decrease when labor-market activity is controlled for, or over time in the destination country (Mussino & Duvander 2016).

Motivated by the idea that family-friendly policy facilitating a work-family balance might directly or indirectly positively affect fertility (Ellingsaeter 2009; Philipov 2009; Rindfuss, Guilkey, Morgan & Kravdal 2010; Thévenon & Neyer 2014), with this study comparing fertility behaviors across different migrants from countries with lower fertility than Sweden and looking at how different mothers' patterns of parental leave use (work-family conciliation) are related to continued childbearing, I aim to answer the following research questions: Do migrants from low-fertility countries exhibit lower fertility than the Swedish norm? Do they show a convergence pattern (over time or across generations? Does parental leave uptake affect their fertility? Does the effect differ by migrant background?

Data and method

This study is based on a collection of Swedish population registers called "Migration Trajectories". Swedish population registers collect all demographic events by date of event, and fertility histories can be reconstructed by linking children to their parents using a personal identification number, if the parents live in Sweden or did so at some point in the past. We also have access to yearly information on educational level attained, income, and social-insurance benefits, as well as the migration histories of all the individuals living in the country during that period. The data also includes births that occurred before migration, if the children also

immigrated to Sweden at some point in their lives[4]. Our data includes all individuals who lived in Sweden at any time during the period 1968–2018. However, our studied population includes all women who had their (singleton) first child in Sweden in January or February during the period 1995-2014. We had to apply this selection due to the data quality; the information on parental leave use has only been collected since 1993, and is considered to be of good quality since 1995 (Duvander & Mussino 2021). Additionally, the information is collected annually and for the parents rather than the child. This is why we focus on the first two months of the year (which allows all our data on parental leave after childbirth to correspond to (almost) full calendar years) and focus on the transition to a second child (so that all the parental leave refers to the first child). The focus on a second child is also justified by the fact that a first child is universal in Sweden as well most of the countries the migrants come from, while a second child is common in Sweden but less so in all the origin countries included in our analysis, even though they have an ideal family size of two children per woman. This allows for studying the effect of parental leave uptake on the transition to higher parities. As this study focuses on women with their first child born in Sweden, we have full information on parental leave information; we exclude women who arrived when they were over 40, to reduce the risk of their having left children behind. Regarding migrant background, this study focuses on women living in Sweden with a Swedish background (born in Sweden to Swedish parents) and with a migrant background from a range of the most prominent countries or groups of countries with fertility[5] lower than that of Sweden. We therefore exclude all women who have one foreign-born and one Swedish-born parent, and all women migrating or having a background from countries with fertility equal or relatively higher to that of Sweden.

In order to link the reproductive behaviours of immigrant women to their migration and other life course events, it is essential to apply methods that can exploit the longitudinal nature of our data. Event history analysis enabled us to study the transition to different statuses by examining individual trajectories (Elder, 1985). The goal of this approach was not only to provide better descriptions and explanations of the process determining the life course but also to link these trajectories together, and the estimated risks reflect both the timing and the

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[4] As pointed out by previous scholars, this creates the possibility that some births that occurred before migration to Sweden might not have been included in the population register (Andersson 2004). However, the available evidence suggests that the number of such cases should be relatively low among women of childbearing age.
[5] We focus on the largest origin countries of migrants in Sweden with a TFR below 1.9 in 2013 (Mussino, Wilson and Andersson 2020).

quantum of the event we are studying. In particular, we look at the transition to a second child, and our baseline is time since the first child.

Because we are looking at the effect of parental leave uptake on the risk of having a second child, we set the clock for studying our population to one year after the birth of the first child. Our design entailed that women who had another birth within this one-year period and had died or migrated had to be excluded from our study. This resulted in a study population of 114,007 women (see Figure 1):

Figure 1. Flowchart of the exclusion of observations

All first-time mothers to children born in Jan/Feb 1995-2014
N=124,372

Excluded for not having lived in Sweden when the child was born

Excluded twins (N=1,940)

Exclusion due to emigration in the year after birth
year 1 (N=603)

Exclusion due to experiencing the event in the year after birth
year 1 (N =97)

Final population
N=114,007
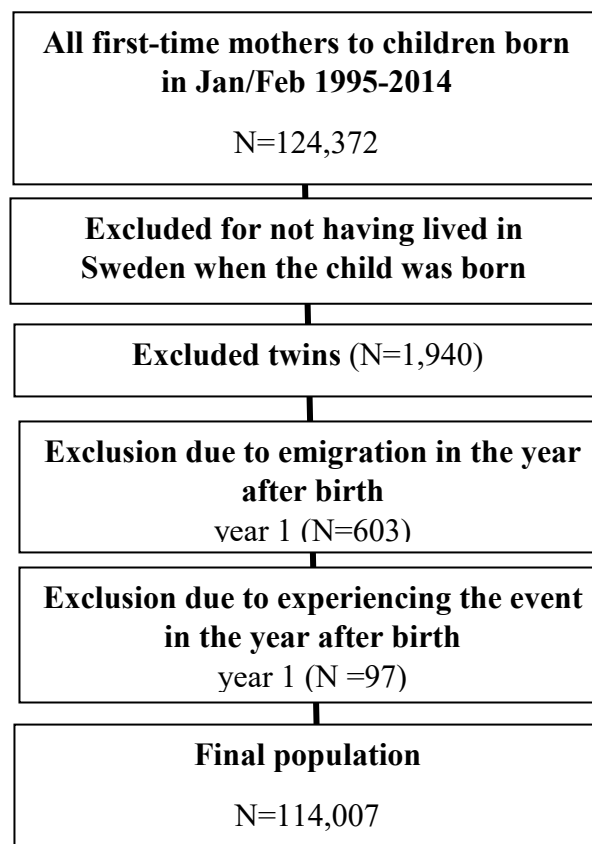
Our focus in this study is migrant background and uptake of parental leave, and the interaction between the two. We use four different indicators for migrant background:

Background: Swedish-born vs foreign-born

Country of birth: Sweden; the former Yugoslavia; Poland; Romania; Germany, Austria, and Switzerland; Italy, Spain, Portugal, Malta, Greece, and Cyprus; Estonia, Latvia, and Lithuania;

the Rest of Eastern Europe; Thailand; Japan, Korea, and China (including Singapore, Hong Kong, and Taiwan); the Philippines; and the Rest of South-East Asia and the Pacific

Duration of stay: Swedish-born; less than two years; two to four years; five to nine years; and ten or more years

Migrant generation: ancestral Swede (born in Sweden to Swedish parents); second generation; 1.5 generation (foreign-born, migrated before age 18); first generation (foreign-born, migrated after age 18)

Except for migrant background, our main independent variable is *parental leave uptake*. The variable is constructed using the information on parental leave days taken in the calendar year of the birth of the first child, divided by the number of effective days in that year. This share is used as a proxy for the time the mother was on leave during the year. The mother's uptake of parental leave is categorized as follows: none – less than 25% of her time; moderate – 25-50%; extensive – 51-75%; and full – more than 75%.

Previous literature reports that continued childbearing and parental leave uptake are influenced by the mother's socioeconomic and demographic characteristics; thus, our control variables include *time since previous child* (baseline), with our process starting 10 or 11 months after the birth of the first child and ending with the experience of the event. Women are censored at 1 January 2017, or at date of death or emigration if this happens before the birth of a second child. We also control for women's characteristics at the time of first birth, such as *age of woman*, *period* (or calendar year), and both *education and labor-market attachment* at the year before the birth.

Table 1: Frequencies of the main independent variables

Country of birth	Freq.	%
Sweden	103,814	91.1
Former Yugoslavia	3,229	2.8
Rest of Eastern Europe	1,347	1.2
Poland	1,209	1.1
Thailand	891	0.8
Japan, Korea, and China (including Singapore, Hong Kong, and Taiwan)	690	0.6
Germany, Austria, and Switzerland	652	0.6
Rest of South-East Asia and Pacific	525	0.5
Philippines	450	0.4
Romania	424	0.4
Estonia, Latvia, and Lithuania	417	0.4
Italy, Spain, Portugal, Malta, Greece, and Cyprus	359	0.3
Duration of Stay		
<2	2,239	2.0
02-04	3,068	2.7
05-09	2,123	1.9
10 or +	2,763	2.4
Swedish-born	103,814	91.1
Migrant Generation		
Ancestral Swede	102,325	89.8
2nd	1,489	1.3
1.5	2,645	2.3
1st	7,548	6.6
Parental leave uptake		
0-25%	6,425	5.6
26-50%	17,536	15.4
51-75%	48,081	42.2
76+%	41,965	36.8
Total	114,007	

Results

Do migrants from low-fertility countries exhibit lower fertility than the Swedish norm? Do they show a convergence pattern (over time or across generations)?

To answer the research questions I estimate the propensity to have a second child, controlling for the mother's socioeconomic, demographic, and migratory characteristics using a piecewise-constant exponential hazard model, for women with a Swedish background, or a migrant background from countries with comparably lower fertility than that of Sweden, who had their first child in Sweden in the period 1995-2014. As I was interested in different aspects of the

migration background, I ran four separate models looking at the variables *background* (Model 1), *country of birth* (Model 2), *duration of stay* (Model 3), and *migrant generation* (Model 4).

All models are controlled for the socioeconomic and demographic characteristics, including parental leave uptake. Figure 2 presents results for the main variable of interest of each model. Model 1 and 2 aim to answer the first research question and test more specifically the socialization hypothesis. Model 1 shows that, overall, migrants born in countries with a TFR lower than that of Sweden have a 22% lower risk of having a second child, supporting the socialization hypothesis. Model 2 also shows that this is true for all groups except those from Germanic countries, the former Yugoslavia, and South-East and Pacific Asia, and is not statistically significant for Southern European countries. For example, Thai and Philippine women have a respective 47% and 49% lower risk of having a second child.

Model 3 and 4 aim to answer the second research question and to test the adaptation hypothesis. Looking at *duration of stay* I found a reverse U-shape, with migrants with longer residency in Sweden and the newly arrived having a higher risk compared to those with a medium-long duration of stay, underling both an arrival effect for recent migrants and a convergence in the behaviors for more settled migrants. Migrant women who have lived in Sweden for five to nine years have the lowest risk of having another child (-30% compared to the reference category). Model 4 shows that there is no statistical difference between ancestral and second-generation Swedes, and that there is a clear gradient by age at migration, with women migrating at younger ages (0-17) being more similar to ancestral Swedes than adult migrants (18+). First-generation Swedes have a 28% lower risk of having a second child than ancestral Swedes. Model 3 and 4 support the adaptation hypothesis both in terms of time since migration and across generation.

Figure 2: Hazard ratio of having a second child
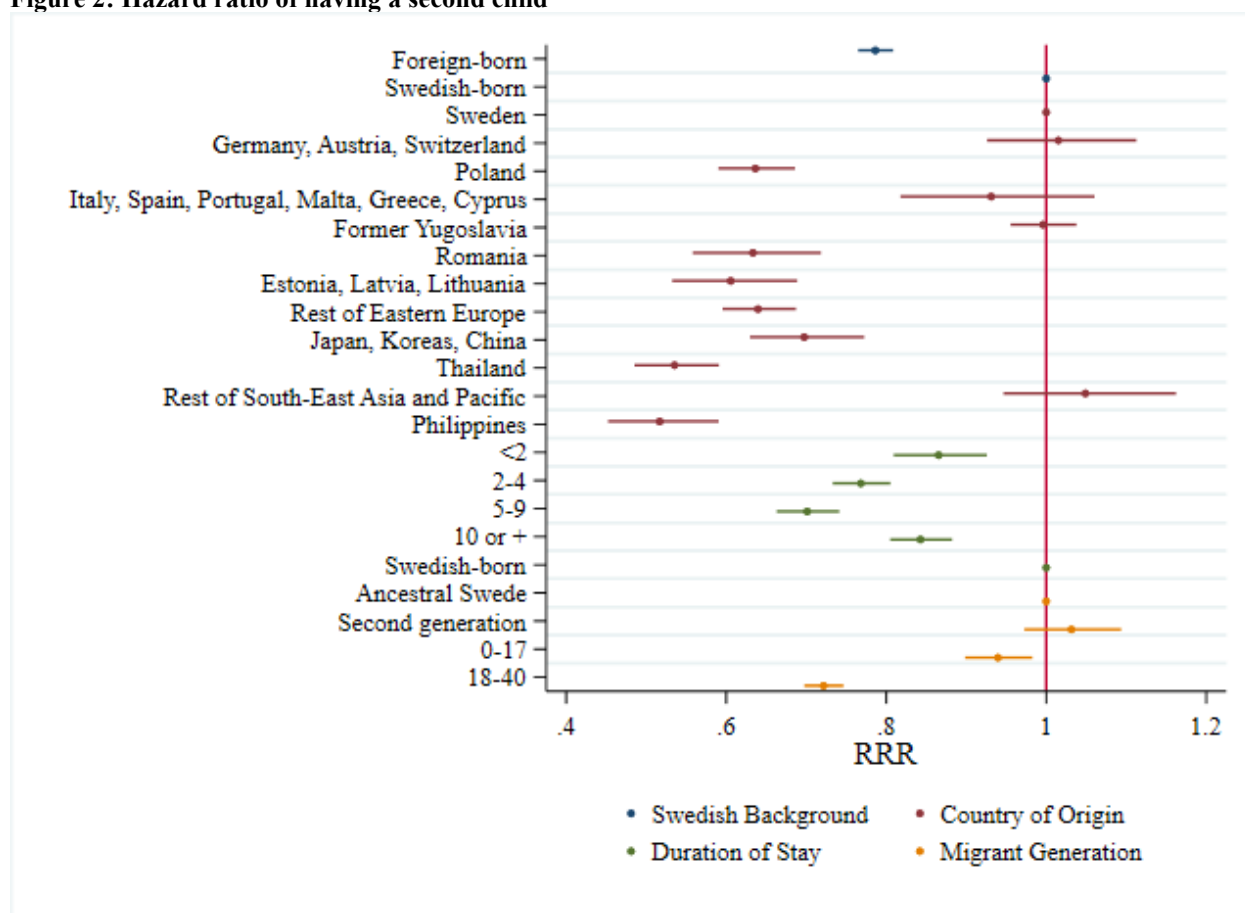
Data: Migration Trajectories
Note: Own elaboration. All models are controlled for time since first child, parental leave uptake, age of woman, calendar year, education and labor-market attachment. Results for the control variables are shown in the appendix in Figure A1.

Does parental leave uptake affect their fertility?

This chapter also investigates the effect of parental leave uptake on the risk of having a second child. In accordance with previous research (Mussino & Duvander 2016), migrants take parental leave more intensively than Swedish-born do, with 51% among the foreign-born being on leave for more than 76% of the first year of the child. However, there is also a higher proportion of foreign-born among women taking almost no leave (Table 2).

Table 2: Parental leave uptake by Swedish background

	Swedish-born	Foreign-born
0-25%	5	13
26-50%	16	10
51-75%	44	27
76+%	35	51
	100	100

Looking at the effect of parental leave on the transition to a second child, the hazard ratios show a reversed U-shaped pattern, found already by Duvander and Andersson (2006) and Duvander, Lappegård, and Andersson (2010), exhibiting the lowest risks of having a second child among the extreme users, with both no and very high levels of maternal uptake of leave. A similar pattern is also found among migrants. However, when socioeconomic characteristics are controlled for the differences diminish, particularly among migrants:

Table 3: Hazard ratio of having a second child

	Swedish-born		Foreign-born	
	Null Model	Full Model	Null Model	Full Model
0-25%	0.82***	0.94***	0.79***	0.84***
26-50%	1	1	1	1
51-75%	0.91***	0.91***	0.90***	0.88***
76+%	0.73***	0.78***	0.86***	0.83***

Data: Migration Trajectories
Note: Own elaboration. Null model is controlled only for time since first child. Full models are controlled for time since first child, parental leave uptake, age of woman, calendar year, education and labor-market attachment. *** 0.001; ** 0.01; * 0.1

Does the effect differ by migrant background?

To study whether the effect of parental leave uptake is different among migrants' backgrounds, I ran the interaction between the *parental leave uptakes* with (in separate models): *background* (Model 1a), *country of birth* (Model 2a), *duration of stay* (Model 3a), and *migrant generation* (Model 4a). Table 4 shows the main effect of the different migration background indicators for the reference category (parental leave uptake 25-50%) and the multiplicative effect (product term) for the migrant background, net of socioeconomic and demographic characteristics. In sum, the product terms show how much stronger (or weaker) the effect of parental leave uptake is on the risk of having a second child for different dimensions of migrant background. In other words, I look at how does parental leave uptake modify the effects of migrant background on the transition to a second child. As the main effects of parental leave uptake for Swedish-born are the same as in Table 3, they are not reported again in Table 4.

Model 1a confirms that among women who stay on parental leave for a moderate time, the foreign-born are at a lower risk of having a second child (-25%); however, the product term also shows that, for foreign-born, a full leave has a stronger impact on successive childbearing. Model 2a shows that most of the origin group, when on parental leave for a moderate amount of time, have lower fertility than among Swedish-born. When we look at the product term we

see a quite heterogeneous pattern; however, likely due to the small size of the groups, with few exceptions the difference is not statistically significant. Being on leave full time is strongly associated with the transition to a second child for women from the former Yugoslavia. Taking no leave is associated with a stronger effect for Italian women and a weaker effect for some women of Asian origin. Summarizing, we see that taking no leave reinforces lower fertility for some groups (in line with socialization hypothesis) and, on the contrary, a full leave seems to support an higher risk of having a second child (adaptation process).

The model with duration of stay (Model 3a) indicates that full and extensive leave have a stronger impact on fertility for newly arrived migrants, while no leave and extensive leave weaken the effect for migrants living in Sweden for five to nine years. Model 4a also shows that a full leave has a strong positive effect for the first generation of migrants. Confirming, a stronger effect of full leave on the fertility of migrants.

Table 4a: Hazard ratio of having a second child

	Model 1a		Model 2a		Model 3a		Model 4a	
	Haz. Ratio	P>|z|	Haz. Ratio	P>|z|	Haz. Ratio	P>|z|	Haz. Ratio	P>|z|
Background								
Foreign-born	0.75	***						
Swedish-born	*1*							
Background#Parental leave uptake								
Foreign-born#0-25%	0.94							
Foreign-born#51-75%	0.98							
Foreign-born#76+%	1.14	**						
Country of birth								
Sweden			*1*					
Germany, Austria, and Switzerland			1.02					
Poland			0.60	***				
Italy, Spain, Portugal, Malta, Greece, and Cyprus			0.71	*				
Former Yugoslavia			0.91					
Romania			0.75					
Estonia, Latvia, and Lithuania			0.56	**				
Rest of Eastern Europe			0.63	***				
Japan, Korea, and China (including Singapore, Hong Kong and Taiwan)			0.75	*				
Thailand			0.50	***				
Rest of South-East Asia and the Pacific			0.91					
Philippines			0.66	*				
Country of birth#Parental leave uptake								
Germany, Austria, and Switzerland#0-25%			1.08					
Germany, Austria, and Switzerland#51-75%			0.93					
Germany, Austria, and Switzerland#76+%			1.02					
Poland#0-25%			1.07					
Poland#51-75%			1.11					
Poland#76+%			1.05					
Italy, Spain, Portugal, Malta, Greece, and Cyprus#0-25%			1.60	*				
Italy, Spain, Portugal, Malta, Greece, and Cyprus#51-75%			1.18					
Italy, Spain, Portugal, Malta, Greece, and Cyprus#76+%			1.45					

Former Yugoslavia#0-25%	1.03			
Former Yugoslavia#51-75%	0.96			
Former Yugoslavia#76+%	1.18	*		
Romania#0-25%	0.77			
Romania#51-75%	0.79			
Romania#76+%	0.89			
Estonia, Latvia, and Lithuania#0-25%	1.11			
Estonia, Latvia, and Lithuania#51-75%	1.24			
Estonia, Latvia, and Lithuania#76+%	1.02			
Rest of Eastern Europe#0-25%	0.98			
Rest of Eastern Europe#51-75%	0.94			
Rest of Eastern Europe#76+%	1.09			
Japan, Korea, and China#0-25%	0.74	*		
Japan, Korea, and China#51-75%	0.77			
Japan, Korea, and China#76+%	1.23			
Thailand#0-25%	0.96			
Thailand#51-75%	1.03			
Thailand#76+%	1.14			
Rest of South-East Asia and the Pacific#0-25%	1.13			
Rest of South-East Asia and the Pacific#51-75%	1.11			
Rest of South-East Asia and the Pacific#76+%	1.23			
Philippines#0-25%	0.63	*		
Philippines#51-75%	0.98			
Philippines#76+%	0.69			
Duration of stay				
<2		0.79	**	
02_04		0.60	***	
05_09		0.78	**	
10and+		0.85	*	
Swedish-born		*1*		
Duration of stay#Parental leave uptake				
<2#0-25%		0.94		
<2#51-75%		1.00		
<2#76+%		1.26	*	
2-4#0-25%		1.14		
2-4#51-75%		1.24	*	
2-4#76+%		1.38	***	
5-9#0-25%		0.78	*	
5-9#51-75%		0.76	**	
5-9#76+%		0.98		
10and+#0-25%		0.99		
10and+#51-75%		0.94		
10and+#76+%		1.03		
Migrant generation				
Ancestral Swede				*1*
Second generation				1.10
0-17				0.88 *
18-40				0.70 ***
Migrant generation#Parental leave uptake				
Second generation#0-25%				0.84
Second generation#51-75%				0.93
Second generation#76+%				0.95
0-17#0-25%				1.01
0-17#51-75%				0.98
0-17#76+%				1.14
18-40#0-25%				0.95
18-40#51-75%				0.96
18-40#76+%				1.12 *

Data: Migration Trajectories

Note: Own elaboration. All models are controlled for parental leave uptake, time since first child, age of woman, calendar year, education and labor-market attachment. *** 0.001; ** 0.01; * 0.1

Conclusion

This study aims to provide a different perspective on how parental leave policies influence fertility behaviors. Using the fertility of migrants from low-fertility countries at a relatively high-fertility destination, I study the effect of migrant background and parental leave uptake, and their interaction in the transition to a second child. This new approach allows for a contribution to the discussion of whether flexible, generous parental leave has an effect on subsequent fertility, and if this effect changes depending on migrant background. Thus, while this paper looks at Sweden, it should be also interesting for policy-makers in other (origin) countries who want to learn how a different parental leave policy would affect fertility.

This study confirms previous research on the fertility of migrants. It found signs of socialization, with low fertility for most of the countries (Mussino and Strozza 2012); however, it also found strong evidence of adaptation over time since migration (Andersson 2004) and across generations (Kulu et al. 2019). In particular, I found that socioeconomic factors such as education and labor-market participation play a similar role for different groups (Andersson and Scott 2005, 2007), and this is true particularly for parental leave uptake.

The results also show that women (migrating) from lower-fertility countries may react differently when exposed to different parental leave policies. A moderate amount of time on parental leave, a proxy for balancing work and family life, is having a positive effect particularly among migrants. We can conclude that a flexible and generous parental leave system might help to reverse low fertility, the main cause of accelerated population aging (Kohler et al. 2006; Bloom et al. 2010). However, a full-time leave has a stronger effect on subsequent childbearing for first-generation or newly arrived migrants, likely those who have to rely the most on formal childcare and policy support as they may have a smaller network in the destination country. The interaction between parental leave pattern and duration of stay or and parental leave pattern and migrant generation help to disentangle the policy and normative influence when testing the adaptation argument. Here, I confirm that the convergence is likely a result of a mixture of both - exposure to norm and reaction to policy. Therefore, this study contributes in showing how individual behaviours can be affected by family policy.

This study has three limitations: Despite controlling for socioeconomic characteristics, we were not able to control for unobservable factors such as individual fertility preferences that may select and affect migrants' fertility behaviors; Due to our data limitation, we focused on mothers who gave birth at the beginning of the years (January and February), which drastically

reduced our study population and consequently, for some interactions, resulted in some non-statistical estimates (larger confidence of interval), particularly by country of origin; and Previous literature shows that migrants tend to take most of their parental leave in the first year after the birth (intensively), while Swedes prefer to take a more extensive approach and save some days for the second year. Thus, the focus on parental leave uptake only in the first year after the birth may have resulted in an underestimation of some uptake for native-born Swedes. However, the results are consistent (particularly for Swedes) even when we look at parental leave uptake in the two years after the birth. Meanwhile, this approach would even more drastically reduce the studied population (because in this case we would have to exclude all women who had a second child within the observed windows). Thus, I prefer to focus exclusively on the parental leave taken in the first year.

Despite the data limitations, this paper contributes to the literature on international migrants and on the effects of family and particularly parental leave policies. Following women who grew up in a society with a certain set of norms and a certain fertility preference, and are later exposed to another society's policies, is an important step in studying the effects of a society's norms and policies. Being exposed for a longer time at the destination seems to influence the reception of the norms; however, policies are instrumental in the change in fertility behaviour.

The couple perspective was not the focus in this paper; however, future research should investigate the significance of father's leave on fertility behaviour of immigrant women from low fertility countries as indicator of different gender equality models across different migrant groups.

Acknowledgments

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Supplementary materials

Figure A1: Hazard ratio of having a second birth for the control variables
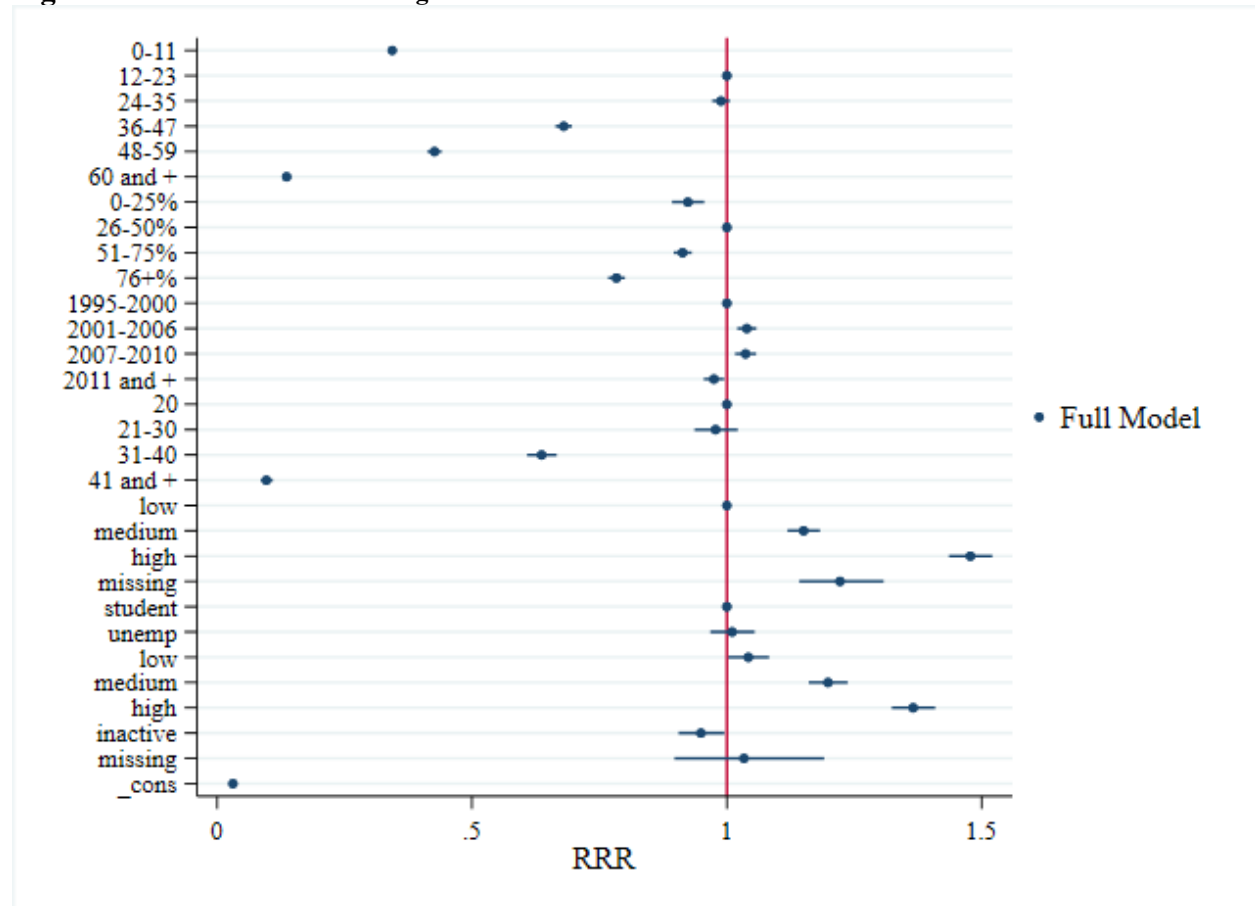
Data: Migration Trajectories
Note: Own elaboration. Full model is controlled for country of birth; see Figure 2.

Even though our main interest is to analyse whether migrant background and parental leave uptake, and the interaction between them, affect the transition to a second child, I would still like to highlight the importance of socioeconomic and demographic characteristics. Our estimation of time since the first child shows a higher risk two to three years after the birth. There is a positive period effect, with higher risk between the years 2001 and 2010. As expected, women who had their first child in their 20s have a higher risk than older women, particularly those over 40. High earnings and high education significantly increase the likelihood of having a second child. Furthermore, mothers with the highest income are those with the highest hazard ratios. These results confirm that the mother's characteristics also play an important role in having a second child.