

Stockholm Research Reports in Demography | no 2019:17



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Stockholm
University

Demography Unit

ISSN 2002-617X | Department of Sociology

Natives and Migrants' Childbearing during the Great Recession: A Comparison between Italy and Sweden

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Abstract: This study contributes to the empirical research on the fertility decline registered in many European countries in the aftermath of the Great Recession adopting a comparative perspective. More specifically, the paper explores childbearing behavior during the crisis across three dimensions of socioeconomic vulnerability: migration background, labor market uncertainty and country context. We compare childbearing behavior among native and migrant women with different recent occupational histories in two countries: Sweden and Italy. Using the most recent available data, respectively the Swedish population registers and the Italian Labor Force Survey, we investigate the change in the probability of having a(nother) child between the pre-crisis (2007-09) and the crisis period (2010-12). Results suggest that, during the initial phase of the Great Recession, the probability of having a child decreases for migrants with unstable careers or low skilled occupations more than for natives. However, relevant differences between the two countries in the latter associations emerge.

Keywords: Great Recession, migrant fertility, Italy, Sweden, employment uncertainty



1. Introduction

The impact of economic crises on population dynamics has been on the demographers' agenda for a long time (Malthus, 1798; Easterlin, 1987; Livi Bacci, 2001). The overall outcome of such strand of research is that economic uncertainty influences negatively fertility decisions, at the very least in terms of timing, inducing a postponement of childbearing, but possibly also affecting the quantum of fertility (Sobotka et al., 2011, Comolli and Bernardi, 2015, Caltabiano et al. 2017). The evidence about the consequences of the Great Recession of 2008 in Europe is in line with such findings, with many studies reporting a strong correlation between, for instance, increasing unemployment rates and fertility decline (Sobotka et al., 2011; Goldstein et al., 2013; Testa and Basten, 2014; Bellido and Marcén, 2016; Comolli, 2017). Despite the rich and growing literature on the association between economic uncertainty and childbearing, however, the evidence regarding migrants' fertility behavior during crisis is scarce. Being generally more weakly attached to labor market and facing greater financial and employment uncertainty, migrants represent a relatively more vulnerable group in society than natives (Sobotka et al., 2011). Sobotka (2017) shows that in 11 out of the 15 European countries considered, in the period 2008-2013, Total Fertility Rate (TFR) fell much more pronouncedly among migrant than natives. It is certainly the case for Italy, where TFR dropped by about 2% among natives and 20% among migrants, while in other countries such as Sweden, the decline in natives' and migrants' fertility was similar (below 5%).

Starting from this macro-level evidence, the first contribution of this paper is to investigate how differently childbearing behavior changed during the Great Recession at the individual level among migrants compared to natives. More specifically, we assume recent migrants to be more negatively affected by the crisis, i.e. more vulnerable, because of their weaker integration in the labor market. Consequently, following the existing evidence on the negative association between uncertainty and fertility, we assume them to postpone childbirth more than others. Conversely, long-term migrants are more likely to have achieved living and employment conditions similar to natives (Chiswick, 1978; Amuedo-Dorantes and de la Rica, 2006), thus being more protected vis-à-vis the crisis and postponing childbirth to a lesser degree than recently arrived migrants.

The second contribution of this study is the investigation of a more traditional dimension of vulnerability, i.e. career instability. Permanent and tenured job positions tend to be more secure during economic downturns compared to temporary contracts, non-standard employment or recently acquired jobs. A solid position in the labor market is usually considered a precondition to parenthood while unstable careers are typically linked to postponement or renunciation to parenthood (Vignoli et al., 2012). Additionally, as emerged from previous studies, also the type of occupation and fertility choices are interrelated, since different occupations generate specific working conditions and socio-

economic settings that may protect and affect family dynamics differently, especially in times of economic uncertainty (Ohlsson-Wijk, 2015; Ekert-Jaffé et al., 2002).

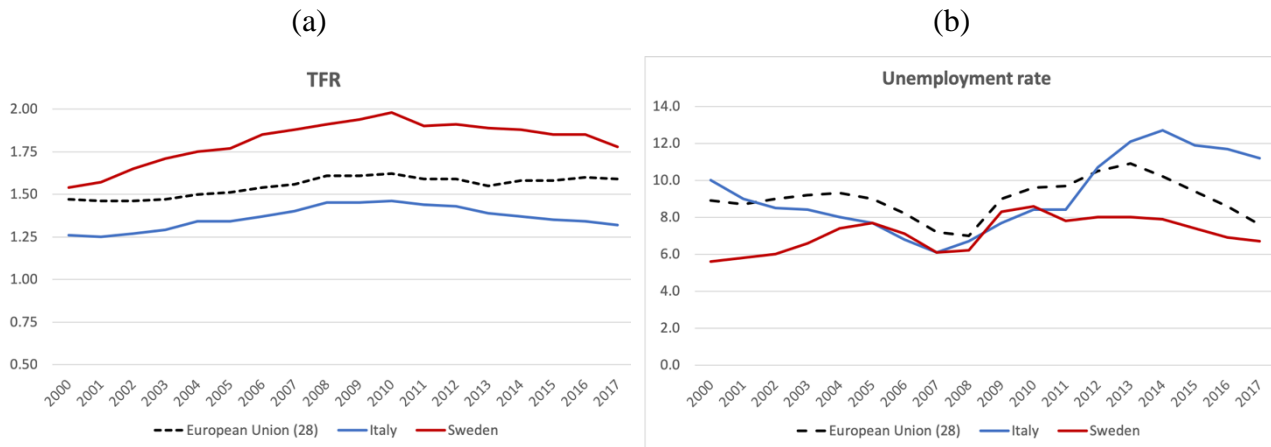
Third, the impact of the Great Recession on fertility and more in general the association between economic and labor market uncertainty and childbearing differs quite a lot not only across social groups but also across national contexts (Adsera, 2004, 2005). The heterogeneity in the degree of coverage of social and family policies mediates the effect of economic shocks on childbearing decisions. Similarly, the degree of protection of the insiders vs. outsiders, the diffusion of precarious contracts, the rigidity of the salary scale, among other labor market features, also mediate the effect of employment insecurity on family decisions, so that having a stable or an unstable career might matter in some contexts more than in others. In addition, welfare and job market dimensions can vary across our social groups of interest - migrants vs. natives - insofar as, for instance, a country grants access to social benefits based on citizenship.

Matysiak and colleagues (2018) analyze the impact of the Great Recession on 258 regions in 29 European countries and find the greatest fertility decline in regions in which the crisis hit the hardest and where the welfare state provided lower support for the socioeconomically disadvantaged (Southern and Central-Eastern Europe). An exception to this pattern is represented by the Nordic countries in which the recession was milder and welfare support is generous, but, despite that, fertility rates dropped substantially. Informed by this empirical puzzle, the present paper analyzes two countries, Italy and Sweden, both characterized by a substantial and prolonged fertility decline after 2010 but that represent two opposite cases in the Matysiak et al (2018) framework. Italy represents a typical case of strong recession-poor welfare and Sweden a typical case of weak recession-generous welfare provisions¹. Figure 1 shows in fact that both countries registered a steady decline in fertility rates after 2010 with Sweden moving from 1.98 to 1.85 in 2013, and Italy from 1.46 to 1.34 in the same years (Eurostat 2018). Moreover, the trend in one of the main indicators of the status of the economy, unemployment rate, has been remarkably similar during the years leading to the onset of the fertility decline. Figure 1 shows that between 2005 and 2010 unemployment in the two countries followed an identical trend of initial decline and subsequent increase. It seems that the macroeconomic conditions preceding the fertility decline were somehow similar in the two countries but started to diverge after 2011, when unemployment rates went on increasing in Italy while levelling off and then declining in Sweden. Our investigation contributes to shed light on this open empirical debate on the fertility rates' decline in Sweden despite the Great Recession being comparatively mild

¹ It is important to acknowledge that, besides their welfare states and the extent to which they were hit by the Great Recession, the two countries differ substantially in a number of other dimensions: migration history, female employment participation and labor market features more generally. These differences are difficult to single out and assessing which contextual features explain the change in childbearing probability during the recession in Italy and Sweden goes beyond the scope of this paper.

and short lived (Kulu and González-Ferrer, 2014).

Figure 1: TFR (2000-2017) and unemployment rate (2000-2017) in Sweden and Italy.



Source: Eurostat (2018)

2. Background

2.1. Women's employment, career uncertainty and childbearing

The theoretical pillars of the relationship between employment and fertility are to be found in the New Home Economics theory (Becker, 1981), in which childbearing is seen as a rational choice that depends on individual preferences, on the evaluation of the costs and benefits of having a(nother) child and on the family's income constraint. If the income or the financial security of the household increases, the number of children will also increase. On the contrary, a job loss or an insecure employment position, via the reduced income or the increased uncertainty about future income, induce couples to postpone childbearing (Ranjan, 1999). Beyond monetary constraints, employment instability signals a lower ability to provide for a family or at least it signals uncertainty in the type of future life that the partner offers, making individuals with unstable careers less attractive in the marriage and childbearing market (Oppenheimer, 1994, 1997). Traditionally a prerogative of men, we can argue that today this applies to women's labor market attachment too, so that it is not only the income loss following women's career interruption, but the uncertainty on future ability to contribute to the couple that makes female employment instability detrimental for childbearing. However, having children implicates an additional indirect cost of the foregone working hours, tenure and career opportunities due to the time spent in parental leave and childcare. Women, being the main childcare providers, suffer from this opportunity cost still more than men do. If the opportunity cost is large enough, it would offset the income and uncertainty effects and women's unemployment or career instability would be positively associated to childbearing.

The existing empirical evidence does not inform us on which conditions need to be met in order for one of the outlined mechanisms to prevail over the others. Empirical evidence on the relationship between women's employment and fertility is highly context-dependent (Matysiak and Vignoli, 2008, 2013). Kreyenfeld (2004) and Róbert and Bukodi (2005), respectively on East Germany and Hungary, find that employment has a positive effect on birth risk. Other studies, including studies on Sweden, do not find any significant influence of women's employment on fertility (Berinde, 1999). For Italy, some studies present evidence of a negative relationship between female labor force participation and fertility (Santarelli, 2011; Busetta and Giambalvo, 2014) while others show no significant association (Bernardi and Nazio, 2005).

Results are controversial also when the focus is on unemployment. Many empirical findings support the view that unemployment and especially persistent (repeated and close spells of) joblessness (Busetta et al., 2019) lead to negative expectations about future financial situation and therefore to childbearing postponement (eAdsera, 2005, 2011; Kravdal et al., 2002, Meron et al., 2002; Del Bono et al., 2015; Varga, 2014). However, a few studies report that unemployment is positively related to fertility (Schmitt, 2008; Ozcan et al., 2010) and other studies find that the association differs across women's educational level (Kreyenfeld, 2009; Schmitt, 2012).

Finally, a number of studies find that unstable careers, more broadly characterized by temporary or flexible contracts, part-time work and other types of precarious, atypical employment (Del Bono et al. 2015) are among the primary causes of childbearing postponement (Baizan, 2005, Billari and Rosina, 2004, Mills et al., 2005; Barbieri et al., 2015; De la Rica and Iza, 2005; Adsera, 2011; Dupray and Pailhé, 2018; Sobotka et al., 2011 and Kreyenfeld et al., 2012 for a review). Barbieri (2011) shows that Italian women's job precariousness² negatively affects the entry into motherhood and Prifti and Vuri (2013) show that increased employment protection in Italy positively affects working women's likelihood to have a child. In Sweden, Lundstrom and Andersson (2012) prove that having a temporary job reduces the propensity to become a parent. Studies from other contexts, however, show that employment uncertainty has no significant effect on fertility (Wolbers, 2007; de Lange et al., 2014) or that it depends on parity, cohort or women's educational level or career tenure (Orsal and Goldstein, 2010; Kreyenfeld and Andersson, 2014; Raymo and Shibata, 2017).

² Women face considerably higher risk than men to have a non-standard, atypical and insecure employment. Women have much smaller chances of moving from an atypical contract to a permanent one, but still face a higher risk of withdrawal from the labor market than men. On top of that, both men and women with non-permanent job contract suffer in Italy from a much larger wage penalty than in other countries (Barbieri 2011).

2.2. Type of occupation and fertility

Besides working or not, different types of jobs can also lead to quite different childbearing decisions. Because of the diverse working conditions and job characteristics that influence the reconciliation of work and family (Ohlsson-Wijk, 2015), previous research shows that there is an association between types of occupations and fertility choices (Begall and Mills, 2012; Martín García, 2010). On the one hand, some occupations (usually tenured well-paid in private companies or public sectors jobs) provide an economically secure basis for family formation through earnings that alleviate the direct cost of childbearing and through employment security. On the other hand, some occupations (usually female dominated, caring or teaching oriented occupations) although less secure and paid less, allow special conditions such as flexible work hours, reduced work hours or work arrangements, which decrease the indirect cost of childbearing (Låppegard et al., 2011). Some studies assimilate self-employment to this second case, documenting a positive influence on fertility of female self-employment because it offers flexible working conditions, although at the expenses of job security (Connelly, 1992; Wellington, 2006). Other studies, however, such as Noseleit (2014), find a positive impact only among older women.

2.3. Migrant women's employment and fertility

Immigrants tend to be disadvantaged in the labor market compared to native workers in a number of dimensions. Migrants face comparatively more obstacles in accessing employment (Bevelander and Pendakur, 2012; Kesler, 2006; van Tubergen et al., 2004), they are more likely to occupy lower status occupations with time-consuming and low skilled jobs (Milewski, 2009; Constant and Massey, 2005; Ortensi, 2015) and they tend to have lower wages (Kreyenfeld and Konietzka, 2002). Female migrants' penalization in the labor market is usually even higher because they carry a double disadvantage in the labor market: the gender and the ethnic disadvantage (Boyd 1984, Mussino and Duvander, 2016; Ballarino and Panichella, 2018).

Migrants are disadvantaged to different extents in Italy and Sweden, because of their different models of immigrants' integration in the labor market (Reyneri and Fullin, 2011). In Northern Europe, where the labor market is highly regulated and there is a low demand of low-skilled jobs, foreigners are strongly disadvantaged with respect to natives in terms of employment probability, but they are less strongly penalized as regards job quality. In contrast, in Southern European countries, where the demand for low-skilled job is high and the labor market is *de facto* poorly regulated in its lowest segments (Reyneri, 1998, 2004), migrants are not strongly penalized in terms of employment opportunity, but they face higher risks of remaining trapped in the secondary segments of the labor market than their native counterparts (Fellini and Guetto, 2018; Guetto, 2018). Accordingly, in Italy

the share of foreign-born women in the labor force is systematically higher than the one of native women, while the opposite holds for Sweden (Eurostat 2018). The incentives to work for women in the two countries are clearly different across social groups. In Italy, a traditional familistic society, native Italian women face a normative cost of being working-mothers, which seems to be less strong for migrant. At the same time, migrant women often have a stronger need of working in order to support themselves (Ballarino and Panichella, 2018). In Sweden, a frontrunner country in gender equality, female participation in employment is the norm (80% of Swedish women worked in 2014, Eurostat 2018). Although it is less so for foreign-born women, in Sweden they still display a higher participation rate than foreign-born women in Italy (Eurostat 2018).

The relation between labor market conditions and fertility behavior among migrants is also highly context-dependent. Andersson and Scott (2005 and 2007) find a positive association between women's labor force participation and transition to motherhood for immigrants in Sweden. Lundström and Andersson (2012) find that being out of the labor force or having precarious employment have negative effects on the propensity to become a parent, for both immigrants and natives. At least in terms of family formation, it seems that the universalistic welfare state of Sweden makes immigrants behave more similarly to natives. The results for Italy are scarce. Fiori et al. (2018) show that overall in Italy between 2002 and 2012 the intention to have a(nother) child among mothers declined significantly and the proportion of women reporting economic constraints as a motivation increased substantially. They also find a convergence over the years of the Great Recession between native Italian and women of another nationality to a similar 20% chance of not wanting a second child due to economic reasons. The authors suggest that non-Italian women tend to work in the private care sector which was less affected by the crisis compared to other sectors where Italian native women work.

3. Research hypotheses

The first aim of the paper is to investigate whether and how, in comparison to natives', the fertility behavior of migrants with different length of stay in the destination country changed during the initial years of the Great Recession (2007-2012). The length of stay is one of the main determinants of reproductive behavior of foreign women (Toulemon and Mazuy, 2004; Milewski, 2010; Mussino and Duvander, 2016). The heterogeneity of findings on the relationship between labor market attachment and fertility among migrants might be partly due to the lack of inclusion of this variable.

We build on two main empirical findings to formulate hypotheses. The first is that economic and labor market uncertainty is generally associated to a postponement of childbearing (Adsera, 2005, 2011; Vignoli et al., 2012; Kreyenfeld et al., 2012; Busetta et al., 2019). Second, informed by the

finding that recently arrived migrants tend to be less integrated and display a weaker attachment to the labor market (Barrett and Duffy, 2008; Rendall et al., 2010; Reyneri and Fullin, 2010), we assume that they are more vulnerable vis-a-vis the Great Recession. On the contrary, migrants who arrived earlier tend to be more integrated into the new society and its labor market (Chiswick, 1978; Blau et al., 2003; Rebhun, 2010); therefore, we argue that they should be less vulnerable to economic shocks compared to the recently arrived migrants. These assumptions together suggest that recently arrived migrants, compared to long-term migrants and natives, would display the strongest postponement of birth during the Great Recession. However, the length of stay in the host country is associated to childbearing probability also through other mechanisms, different from the economic and labor market vulnerability. Recent migrants' fertility behavior, in fact, tends to be closer to that of their origin country (Socialization hypothesis: Mussino and Strozza, 2012a; Milewski, 2010) and, if the migration and childbearing processes are connected, they display a higher fertility right after arrival (Interrelation hypothesis: Mulder and Wagner, 1993; Mussino and Strozza, 2012b). Long-term migrants instead tend to adapt to the fertility behavior of the destination countries (Mussino and Van Raalte, 2013; Mussino et al., 2015), likely behaving more similarly to natives also in their fertility response to economic and labor market uncertainty (Adaptation hypothesis: Andersson, 2004; Kulu and González-Ferrer, 2014). Overall, recent migrants are thus expected to display a higher probability of births (in levels) than long-term migrants and natives, but to be more negatively affected by the Great Recession due to their weaker financial and labor market stability. Conversely, we expect to find weaker postponement among older migrants and smaller differences between them and natives, since they are more integrated in the host society and the labor market.

The second aim of the study is to investigate how protective it is for childbearing chances during a recession, to have a stable employment instead of an intermittent career or non-employment. Following existing studies (Adsera, 2005, 2011; Vignoli et al., 2012; Kreyenfeld et al., 2012; Busetta et al., 2019), we expect that the probability of having a child decreases between the pre-crisis period 2007-09 and the crisis period 2010-12 more for women with unstable job trajectories and in long term unemployment, compared to women durably employed. We also argue that this type of employment vulnerability interacts with migration background in shaping the change in the probability of having a(nother) child before and after the Great Recession. Among migrants, we expect career instability to be even more detrimental for childbearing with respect to natives, because of the cumulative disadvantage in the labor market.

In addition, focusing the group of durably employed women we also test if there are differences in the childbearing behavior during the years of the Great Recession, by occupational categories. One can argue that, while working hours' flexibility and job autonomy might be positively

associated to childbearing during periods of economic growth and stability, during recessions the income effect prevails over the opportunity cost effect, and the job security offered by more standard dependent employment would be more positively associated to childbearing. We thus expect women working in elementary occupations (i.e., workers) to be more vulnerable to the economic downturn with respect to clerks and directors, because such jobs are insecure and low paid, leading to a lower probability of having a child. Conversely, women employed in higher-levels occupations might be more resilient to the economic crisis since their jobs provide good economic basis to bear the cost of childbearing. Following this argument, we also hypothesize that the lower financial insecurity of self-employment, although coupled with higher job flexibility, would induce women to postpone childbearing more than women with a stable and financially more secure dependent employment.

Third, we test the previous hypotheses in relation to the country context by comparing Italy and Sweden, two countries with different welfare states (Esping-Andersen, 1990). Several studies find that in contexts where migrants have more limited social rights, immigrant and native fertility patterns tend to remain more heterogeneous (Parrado and Morgan, 2008). Andersson (2004) for actual fertility and Milewski and Mussino (2018) for fertility intention discuss how the process of adaptation depends on the strength of the country's welfare institutions. Being more traditional and familism-oriented welfare state as opposed to the universalism of Sweden, Italy is expected to display a milder association between job status and childbearing. What is more, even those migrants who in Italy obtain a work permit get very poor benefits from one of the least generous welfare states in Europe (Reyneri and Fullin, 2011). Among women with a stable employment in Sweden, instead, we expect less difference in the fertility behaviors across occupations, because everyone has similar access to social benefits. Finally, informed by the different models of incorporations of migrants into the labor market in the two countries outlined in section 2.3, we expect to see smaller differences among the employed across occupations in Sweden compared to Italy where it's easier for migrants to find a job but much more difficult to leave the trap of low-quality jobs. In addition, since self-employed are less protected in Italy, we expect to find, there more than in Sweden, a larger decrease in independent workers' probability of having a child during the Great Recession compared to the other workers. Overall, we expect migrant women to be more disadvantaged and behaving more differently from natives in Italy than in Sweden.

4. Data and methods

4.1. Data and analytic sample

We analyze the change in the fertility behavior of natives and migrants over the years the Great Recession using individual-level data for Italy and Sweden. We use the Italian Labor Force Survey

(LFS) and the Swedish population registers (Sweden over Time: Activities and Relations, STAR). The differences between the two datasets are numerous and they impose a series of restrictions regarding the selection of the analytic sample. First and foremost, the registers are longitudinal data covering the entire population, while the LFS is a cross-sectional survey of the population. Despite the limitations imposed by the very different sources, at the time of writing the two are the best data available in the respective countries. The Swedish population registers have an individual and longitudinal set up and they cover family-demographic histories and a large amount of socio-economic and background data for the entire population between 1968 and 2012. The LFS is the most reliable survey to use when the focus is on migrants in Italy due to the comparatively large immigrant population surveyed (Fullin and Reyneri, 2009). Moreover, the LFS offers the most recent data available for Italy, necessary to study the aftermath of the Great Recession.

Our selected population in both countries is composed of native and migrant women in reproductive age (15-45 years old) resident in the two countries in two specific years: 2009 (N=58,705 for Italy; N=1,148,394 for Sweden) and 2012 (N=52,903 for Italy; N=1,171,886 for Sweden). To overcome the problems posed by the cross-sectional character of the Italian LFS, we pool the samples from the two years but only use retrospective information on births and women's occupational careers during the three previous years: 2007-09 (pre-crisis) and 2010-12 (crisis). Women's fertility history in the Italian LFS is based on the information on the number and age of the co-resident children (Own-children method, Cho et al., 1986). This method is applied to many surveys in several European countries for the study of fertility (Bordone et al., 2009; Adserà and Ferrer, 2011). We weight the Italian data in order to report estimates to the relevant population of interest. We run separated but identical analyses for the two countries.

4.2. Variables and methods

The dependent variable, the probability of childbirth, is a dummy variable that records whether a woman had a child during 2007-2009 or 2010-2012³. We exclude foreign-born women who arrived during those three years, because they could have had a child abroad in those years that would not be accounted for in our estimates. We use linear probability models (LPM) to study the probability of having a(nother) child⁴. The main explanatory variable is the period dummy 2009 vs 2012 which

³ We chose 2009 and not earlier years because it is the first LFS wave for which micro-data are fully available. Previous waves lack important information, e.g., about age and education at the start of observation period. We chose 2012 because it is the most recent available year for Swedish data. Robustness checks using earlier or later waves for Italy do not suggest major differences.

⁴ Logit model have been shown to suffer from estimation bias when interactions terms - the main focus in this paper - are used (Mood, 2010). Moreover, the LPM offers the advantage of simplicity of interpretation of interactions and predicted probabilities are shown to be identical to those provided by the Logit models.

would represent the change in probability of having a(nother) child over the (initial) years of the Great Recession. Our second explanatory covariate is a categorical variable for women's migration background distinguishing between natives, recent and long-term migrants. The latter distinction is based on the length of stay of migrant women in the destination country being lower or equal or greater than 10 years. We interact these two variables to measure the period effect on the three origin groups. Since parities are not identically linked to economic and labor market uncertainty and mothers (especially of young children) are less active on the job market than childless women (Boeckmann et al., 2015), we run this set of models separately for the probability of having a first child or a second or higher parity.

In a second set of analyses we add employment status. Complete individual working histories are not available for the Italian LFS data, but we only know the employment status at the time of the interview (employed, unemployed or inactive) and the duration of that status. To overcome this lack of information and still ensure that we backdate employment to childbirth, we group women in four categories based on their labor market status during the entire three years preceding the eventual childbirth. First, women who have been employed in the same place for at least three years; second, women who have been unemployed⁵ for at least three years and third, women who have been inactive for at least three years. The forth and residual category includes all the other women, namely those who have changed either job or employment status at least once over the last three years. These women might have gone in and out of the labor market, changed occupations or simply workplace, during the last three years. This category of women with an unstable career is admittedly very heterogeneous. Nevertheless, what these women have in common is the experience of some kind of interruption in their recent career development, voluntarily or not, a situation of employment uncertainty and instability, characterized by alternations of (short-term) employment and non-employment. We introduce women's employment status preceding childbirth in the model first as a control and, second, as an interaction with the period dummy to test whether the effect of the crisis was concentrated in a particular social origin group *and* in a particular job status.

In the final set of analyses, we focus on women who had a stable employment in the three years preceding the observation in 2009 and 2012 to test whether the changes in childbearing probability over the years Great Recession varies by occupation. We use the type of work (dependent work vs. self-employment) and the International Standard Classification of Occupations (ISCO) to group women into four categories: self-employed, managers or directors, clerks and workers. Dependent workers were defined through the "Major Groups" classification of ISCO-08 as follows:

⁵ As regards Swedish data, individuals are considered unemployed for at least three years if they received unemployment benefit during three consecutive years, regardless of the total amount of the benefit.

“managers or directors” include major groups 1 and 2 (managers and professionals); “clerks” include major groups 3, 4 and 5 (technicians, associate professionals, clerical support workers, services and sales workers); finally, “workers” include major groups 7, 8 and 9 (craft and trades workers, plant and machine operators and assemblers, elementary occupations).

Finally, all models include the following control variables measured at the beginning of the observation period (2007 for women in the 2009 wave and 2010 for women in the 2012 wave): women’s age and age squared, education (primary, secondary, tertiary), civil status (unmarried, married, widowed or divorced) and the region of residence⁶ (NUTS1). In models in which we do not distinguish between first or higher order births, we control for previous parity (childless, having at least one child). Similarly, in models in which we do not distinguish between recent and long-term migrants, we control for their length of stay in the destination country. Results are illustrated graphically using predicted probabilities of having a(nother) child. Complete models are reported in the Appendix (Tables A2 to A5).

5. Results

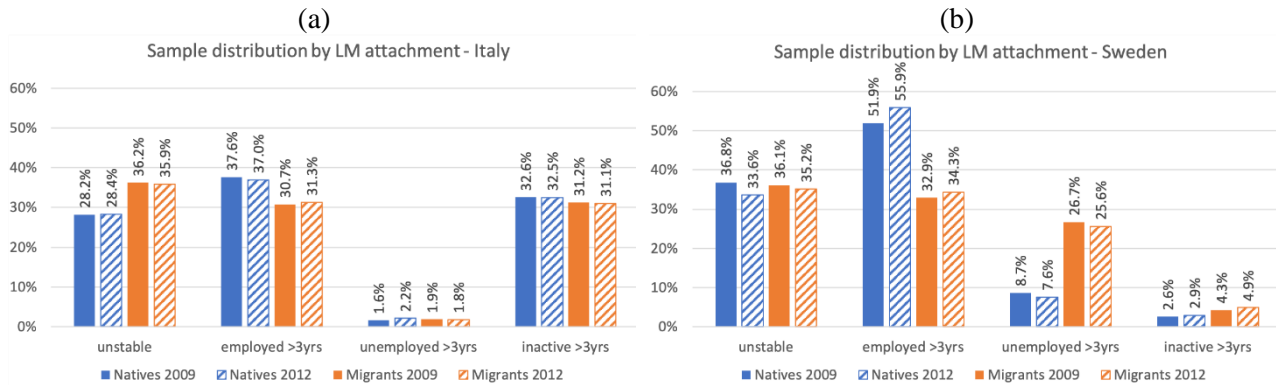
5.1. Descriptive results

Figures 2-3 show the distribution of women according to their employment status and the distribution of occupations among durably employed natives and migrants in 2009 and 2012, in Italy and Sweden⁷. In Italy, the most remarkable change between the two periods is the increase in the share of long-term unemployed native women (from 1.6% in 2009 to 2.2% in 2012, see Tab 2A-2B), while the differences between natives and migrants are relatively small. However, if we look at the distribution by occupation, there are instead marked differences between natives and migrants durably employed. Natives are much more likely to be employed in top occupations (directors, managers) or as clerks, while about 1 out of 2 migrants work in elementary occupations (e.g., workers, assemblers, cleaners). In Sweden the differences between natives and migrants are much more pronounced. Foreign-born are less likely to have a stable employment and they are overrepresented among long-term unemployed. Conversely, the distribution of occupations among stable workers is significantly more homogeneous than in Italy. These descriptive findings are in line with the theories of immigrants’ integration in the labor market presented in par. 2.3, predicting large natives/migrants employment gap in Sweden but not in Italy, and high natives/migrants occupational gap in Italy but not in Sweden.

⁶ We did not show models by migrants’ country or region of origin. We had them in a previous version of the paper but, even aggregating by fertility regimes, due to the very small cell size results were difficult to interpret.

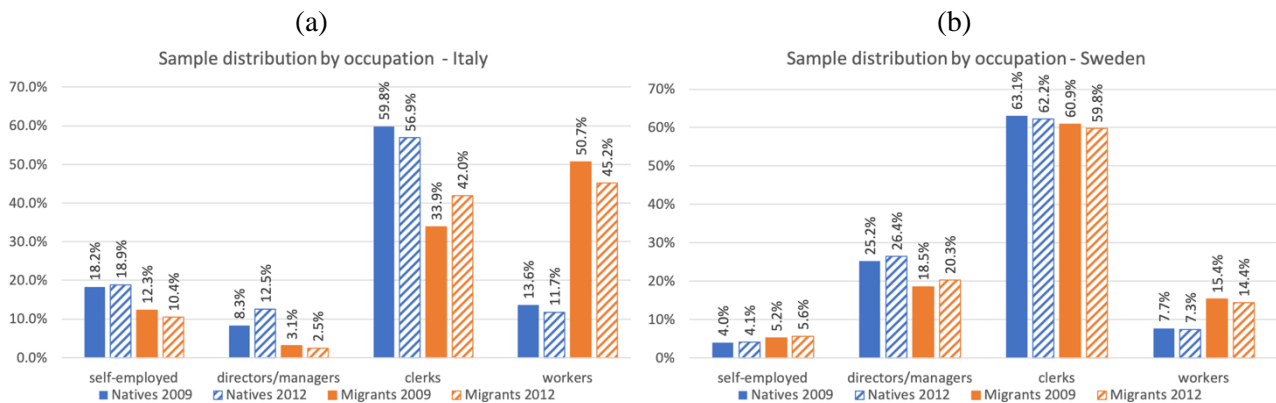
⁷ Descriptive statistics are provided in the Appendix (Table A.1).

Figure 2 – Employment status (a) and occupation (b) among native and foreign-born women in 2009 and 2012, Italy.



Source: elaboration of the authors based on Italian LFS.

Figure 3 – Employment status (a) and occupation (b) among native and foreign-born women in 2009 and 2012, Sweden.



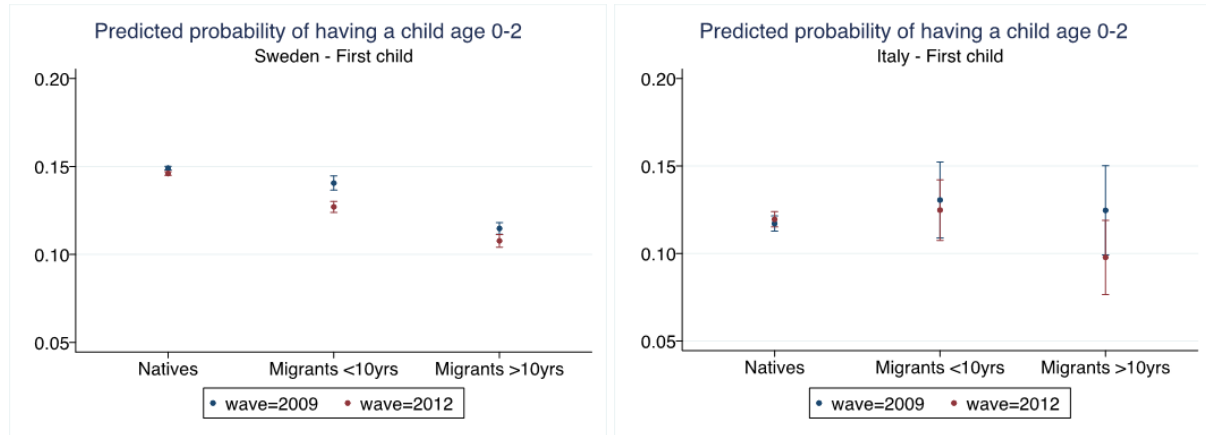
Source: elaboration of the authors based on Swedish Population Registers.

5.2. All women

First, we are interested in whether and how the probability of having a child for women living in Sweden and in Italy changed in 2010-2012 with respect to 2007-2009, depending on their migration background and their employment status. Figures 4a-4b show the comparison between the predicted probabilities of having, respectively, a first or a higher parity child in 2009 and 2012 for native women, women who migrated during the previous ten years or longer than ten years before. Control variables are at their mean value (Tab. A2 reports complete results). The decline in the probability of birth in Sweden among recent migrants is concentrated on first births (from 14.1% to 12.6%). The probability of having a first child decreases between 2009 and 2012 also among Swedish native

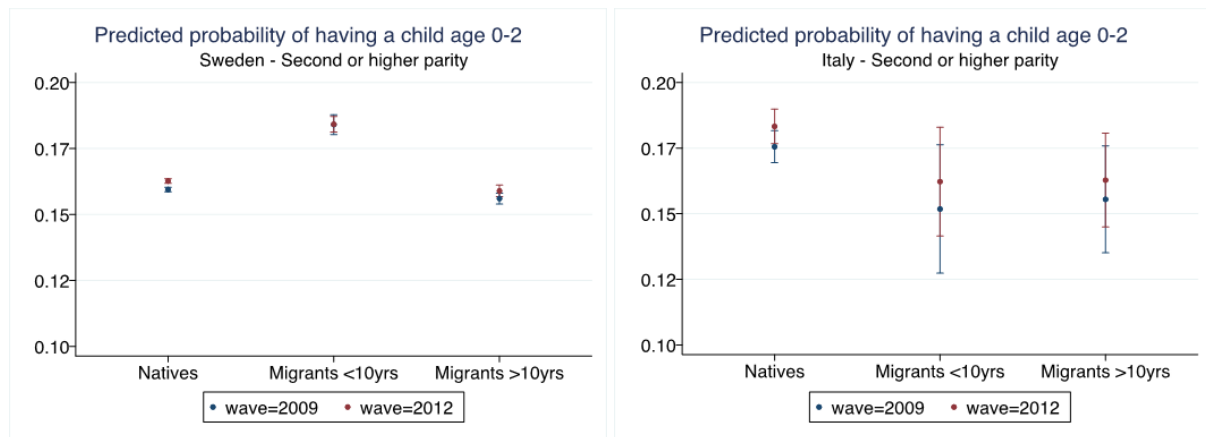
women and weakly also among long-term migrants. On the contrary, the probability of a second or higher birth slightly increases for both native and long-term migrants. In Italy, it seems that the probability first births declined during the crisis among long-term migrant women, although the confidence intervals are too large to identify a precise estimate. We do not find any significant change in the probability of second or higher order births between 2009 and 2012 in Italy.

Fig 4a – Predicted probability of a first child in the last three years (2009 vs. 2012).



Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Fig 4b – Predicted probability of an additional child in the last three years (2009 vs. 2012).



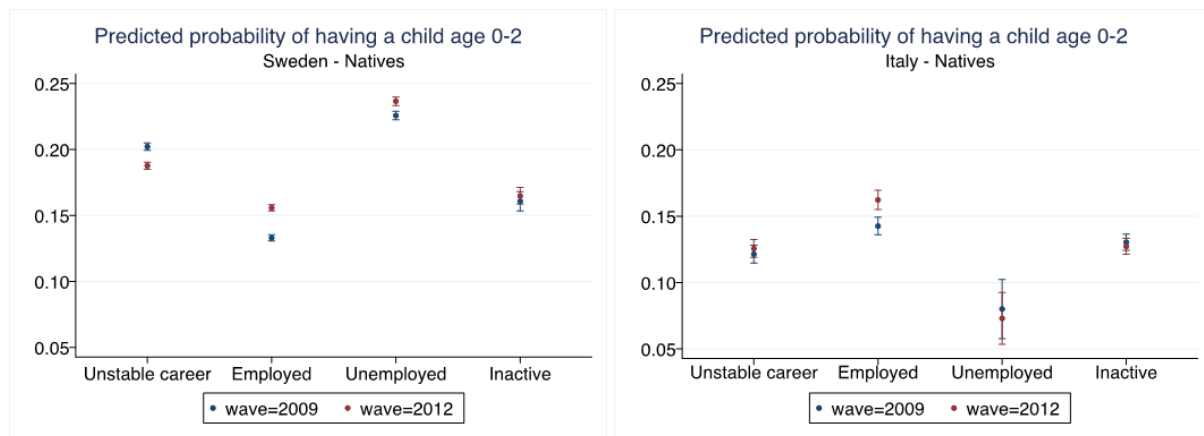
Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Figure 5a and 5b show the predicted probability of having a(nother) child for natives and migrants respectively, in the two periods across the four categories of employment status⁸ (full models in Tab. A3). Among Swedish native women, the chances of having a child in the recent period increase

⁸ When we further distinguish by employment status and occupation substantial differences across parities do not emerge, therefore, for the sake of brevity we present models pooled by (but controlling for) parities (results by parities are available from the authors). Similarly, we present the results for overall migrants because we do not have enough observations in the Italian dataset to run specific models (i.e., recently arrived vs. long-term). We control for duration of stay.

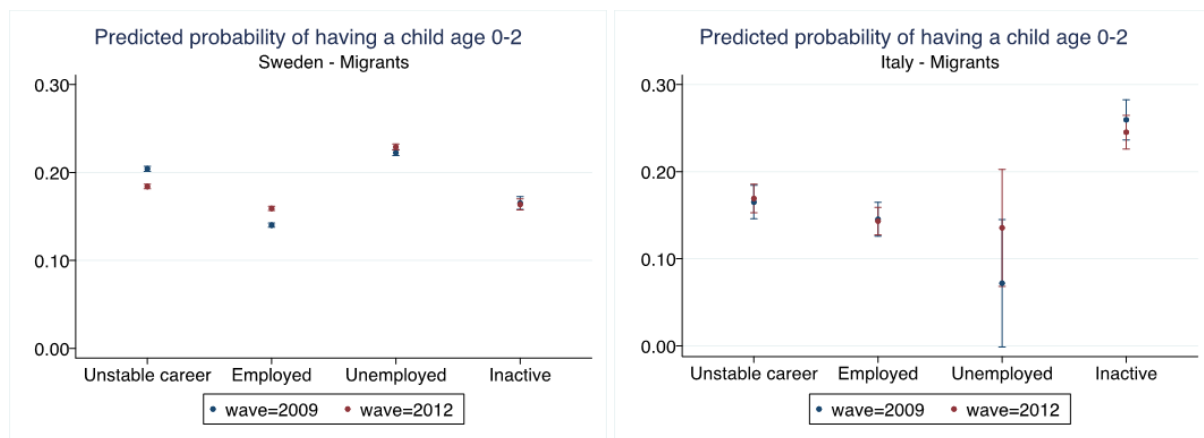
significantly for those who are regularly employed during the previous three years, and it increased slightly also for unemployed native women. On the contrary, the probability of having a child decreases for Swedish women with unstable careers, moving from 20.2% to 18.7%. Similar differences arise among foreign-born women, with larger gaps: the probability of having a child for Swedish migrants with unstable careers drops from 19.4% to 15.2%. Among Italian women, we find an increase in the probability of having a child between 2009 and 2012 among native women who have been consistently employed during the previous three years. In all other categories, point estimates and confidence intervals for the probability of birth across the years of the crisis largely overlap. This seems to indicate that in Italy the probability of childbirth did not change during the crisis among inactive women or those with unstable careers or unemployed either native or migrants. While this might not be surprising regarding women out of the labor force, results on working women with unstable careers and experiencing long-term joblessness is unexpected.

Fig 5a – Predicted probability of a(nother) child in the last three years (2009 vs. 2012). Natives.



Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Fig 5b – Predicted probability of a(nother) child in the last three years (2009 vs. 2012). Migrants.

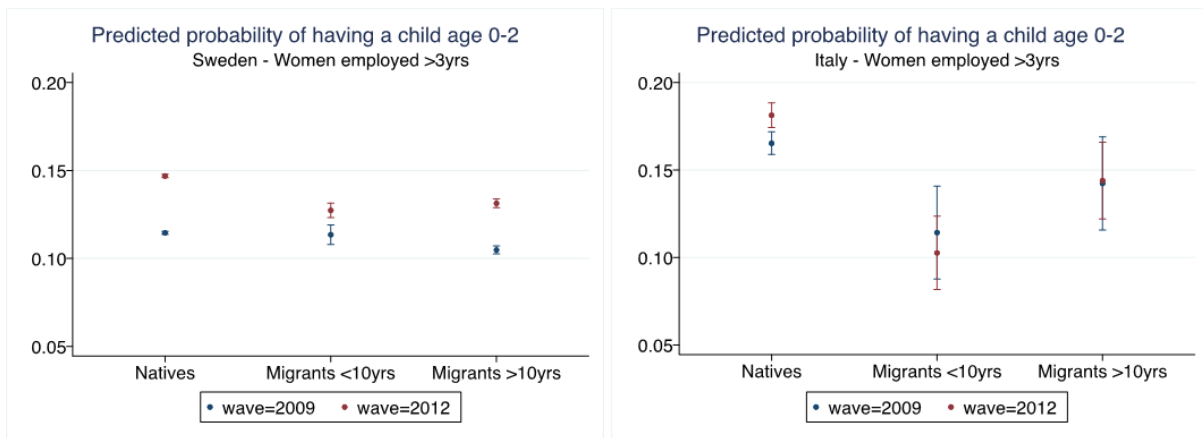


Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

5.3. Working women

Focusing on the subsample of women who have worked in the same place during the previous three years, Figure 6 shows that in Sweden women with a stable employment the probability of having a(nother) child increases for both natives and migrants but with different intensities (+3.2% among natives, +1.4% among recent migrants, +2.6% among long-term migrants). In Italy childbearing probability increases only among native employed women, whose probability of having a child is 16.5% in 2009 and 18.1% in 2012, and no relevant variation in the probability of having a child is detected among long-term migrant women with a stable employment. For recently arrived continuously employed migrant women, instead, the probability of having a(nother) child seems to decline during the crisis, however, the point estimates are too imprecise to draw definite conclusions.

Fig 6 – Predicted probability of a(nother) child in the last three years (2009 vs. 2012). Women employed for at least 3 years.

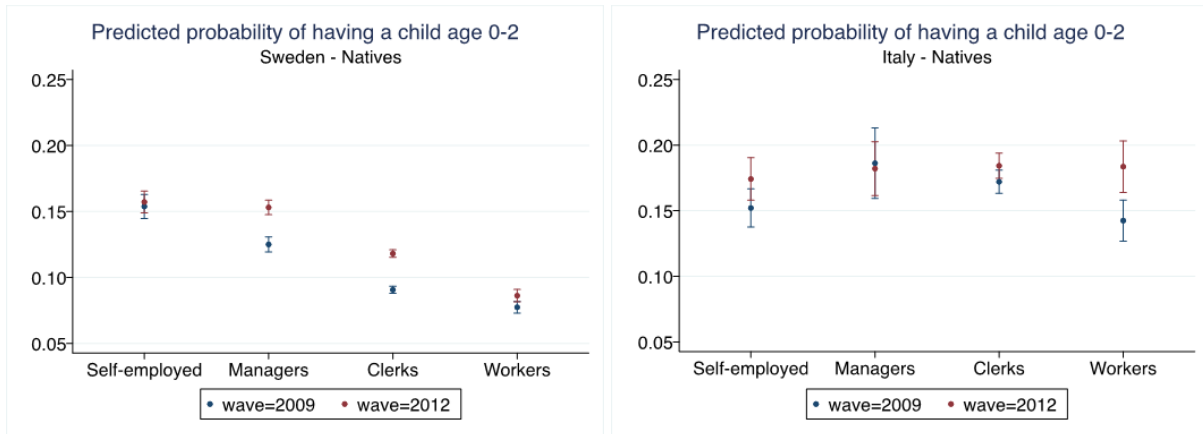


Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Figures 7a-7b plot the predicted probability of having a child for, respectively, employed natives and migrants across four types of occupations: self-employed, managers, clerks and workers. Full models are available in Tab. A5. The probability of having a child in the last three years is higher in 2012 with respect to 2009 among all native Swedish with a dependent work while no variation is recorded among self-employed. Among native Italian women, workers are the only occupational class whose childbearing probability significantly increases in the initial years of the Great Recession. Among working migrant women in Sweden, the pattern is almost identical to natives, with a positive period increase in the probability of having a child among migrant with a dependent work. Among working migrant women in Italy, the same advantage of dependent work does not emerge as it did for native Italian. Among migrant self-employed women, instead, we see a decline in the chances of childbirth over the years of the crisis. However, the confidence intervals are very large and estimates too

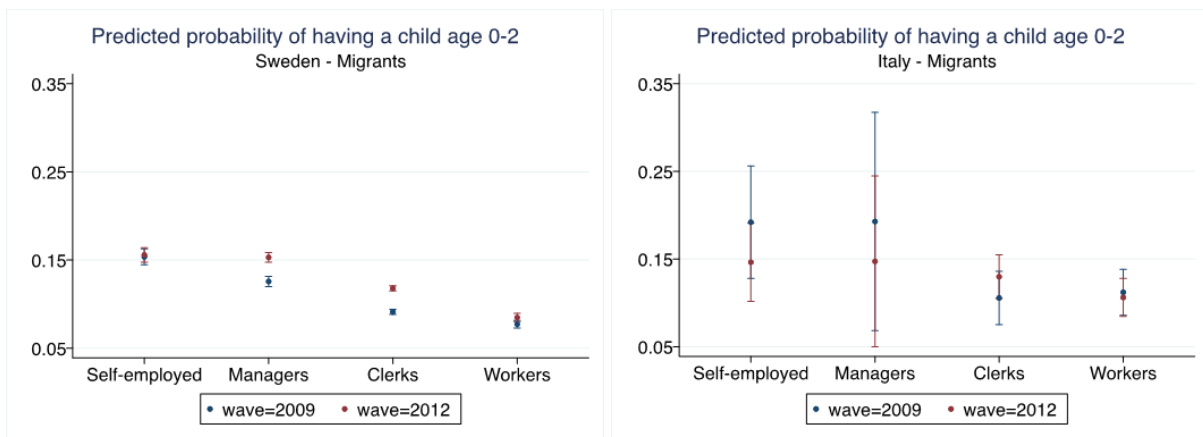
imprecise (and close to those of migrants' managers) to conclude that self-employed foreign-born women postponed childbearing during the crisis substantially more than employed migrants.

Fig 7a – Predicted probability of a(nother) child in the last three years (2009 vs. 2012). Women employed for at least 3 years, natives.



Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Fig 7b – Predicted probability of a(nother) child in the last three years (2009 vs. 2012). Women employed for at least 3 years, migrants.



Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

6. Summary and conclusions

Building on the literature showing that during economic downturns fertility declines (Sobotka et al., 2011; Goldstein et al. 2013; Comolli, 2017), we compare changes in childbearing probability over the initial years of the Great Recession in Italy and Sweden. Despite being two heterogeneous countries, they share a substantial drop in fertility rates after the onset of the crisis that opens up to interesting comparative questions. Using the Italian Labor Force Survey and the Swedish population registers we focus on the change in the probability of having recently had a child between the pre-crisis period (2007-09) and the initial years of the crisis (2010-12). More specifically, this study investigates whether relatively more vulnerable groups in society display a stronger postponement during the Great Recession compared to less socioeconomically fragile groups. A first source of vulnerability is the migration background. We further consider the length of stay in the destination country as a proxy of the economic and labor market integration of migrants into the new society. Our hypothesis of a declining childbearing probability during the crisis among recently arrived, less integrated, migrants was confirmed only for first births in Sweden. In contrast, in Italy the probability of having a child in the considered period declines only for long-term migrants. The argument that the processes of migration and childbearing are interconnected is generally supported both in Sweden and in Italy. The probability of birth is always higher in levels for migrant women who arrived less than 10 years before compared to women who migrated before (Okun and Kagya, 2012; González-Ferrer et al., 2017). Unsurprisingly, this difference disappears when we look at continuously working women.

Second, we then investigate labor market vulnerabilities, which we assess both in terms of women's employment status and type of occupation. The theoretical assumption behind this is that not only labor market attachment but also occupational segregation in less protected jobs generate the type of uncertainty that can influence childbearing decisions. A decline in the probability of having a(nother) child is witnessed among unemployed or precarious native women in Sweden and not among the durably employed. The same pattern can be found among migrants, but with a steeper drop in the birth probability among women with unstable careers. The stronger decline for women in unstable careers with respect to non-working women suggests that the prevailing mechanism in Sweden is the uncertainty effect, more than the income effect, especially for migrants. This might be linked to the generous social benefits in Sweden to which non-working women have access to. In Italy, on the one hand we do not find a significant decline in the probability of having a(nother) child among women with unstable careers or unemployed but, on the other hand, the only positive variation in childbearing probability during these years of the Great Recession is registered for native women with a stable employment. Findings for Italy are in line with theories about a protective income effect

during economic downturns related to women's stable employment, although we cannot draw definite conclusions since we do not find precise estimates of the effects among non-working and unstable career women neither for natives nor migrants. Finally, on employed women our analysis on Swedish data confirmed results obtained in other studies (Andersson and Scott, 2005 and 2007): once employed, migrants tend to behave like natives. The probability of having a child increases between 2009 and 2012 in all occupational and time-since-migration categories. The same cannot be said about Italy: in all occupations native women display a higher childbearing probability than migrants and for them we even witness an increase in the chances of having a(nother) child. On the contrary, self-employed migrant women seem to postpone childbearing during the initial years of the Great Recession in Italy.

Before discussing the implications of our findings, it is important to acknowledge that the study suffers from a few limitations. First and foremost, due to the Italian LFS data, some restrictions had to be placed to the analytical sample and research design. Most notably, we cannot look at how changes in labor market variables influence childbearing. With this respect, panel data are always preferable when studying life course family decisions, however, longitudinal data on Italy covering the period of the crisis were not available at the time of writing. For this reason, we could not assess the causal effect of the crisis on childbearing but only period associations. In addition, the measurement of career instability as a residual category might include women who did not really interrupt their career but simply changed job or workplace. This might include women who are actually promoted to a better job which is not exactly the type of employment insecurity we are pointing at in this study on the Great Recession, but more a problem of "role incompatibility". In addition, the selection of women with a stable employment for three years represents a deliberate choice of the authors. We made this choice picking the shortest interval for which we had childbearing information for the LFS (0-2 years old child in the household) to measure employment the year before the birth of the child but limiting as much as possible the selection on the length of employment. However, the pool of women with a stable employment changes in the two periods in relation to our main explanatory variable, the Great Recession. The crisis supposedly reduced the chances of keeping a stable working position, therefore in 2012 compared to 2009 the group of women who stays in the sample represents the strongest labor market candidates who manage to retain their jobs notwithstanding the crisis. The sample selection might possibly bias results on occupational differences if the selection is stronger in some types of jobs than others. Results on this part of the paper thus have to be interpreted with caution. Finally, due to the complexity of the study we could not address directly in the analyses the numerous differences between the Italian and Swedish context (e.g. migration history, female employment participation, welfare states and the extent to which they

were hit by the Great Recession). This means that we cannot point to any specific contextual feature to explain the cross-country heterogeneity in our findings.

Bearing these limitations in mind, our paper shows that fertility behavior did not change in the expected direction in all groups. First, in both contexts we confirm our hypothesis that, in the early years of the crisis, the migration background represents a vulnerable condition at least in terms of childbearing. However, only for Sweden we could confirm that the time since arrival is a good proxy of the labor market integration of migrants in the host society, as far as at least a lower integration is associated to a stronger postponement of childbearing compared to natives and long-term migrants. Second, for migrant women unemployment and career instability during the crisis seem to be more detrimental in Sweden than in Italy; while larger differences across migration background emerge in Italy among working women. During the crisis, self-employed migrant women tend to delay childbearing more than migrant women in other occupations in the Italian context. These results confirm previous findings that show that migrants are more disadvantaged in Sweden in terms of access to employment but less segregated into bad occupation once working. The opposite is true for Italy, in which case we show that migrant women suffer a larger childbearing penalty if self-employed, a far less protected job condition in Italy than in Sweden. In addition, we can add that, in Italy, atypical job contracts on average last longer than the three years window we consider here for being durably employed⁹. This means that in our reference group of durably employed women we might be including some precarious contracts. Although probably not being the most precarious, they still represent a trap into non-standard employment (Barbieri 2011). This means that the effect of career instability we are measuring here does not translates one-to-one into contract precariousness, or at least that the negative effect of career instability relative to stable employment in Italy might be here underestimated.

Finally, our results about Italy differ substantially from Sobotka's (2017) macro-level findings, according to which the Italian TFR decreased during the years of the Great Recession due to a drop in migrants' fertility. In our findings there is no precise evidence of a strong decrease in the probability of having a child in 2012 with respect to 2009 among migrants. Apart from the obvious difference between TFR and the probability of having a child during a three years-span, another explanation to justify such a clear divergence relates to over-coverage. Migrants residing in Italy might have left the country during the years of the Great Recession, because of the crisis, without cancelling themselves out of the municipal registers (Monti et al., 2018). Such lack in out-registration when migrants emigrate is common, since they might forget to register their exit or might have

⁹ 40 months for women in atypical self-employment and 44 in atypical dependent employment; 50 months in the south of Italy, ILFI data on births cohorts after 1970.

incentives to remain in host population registers (Weitoft et al., 1999). Official statistics, on which the calculation of TFR is based, compute a lower fertility rate not because of the lower number of births, but due to the over-coverage of the migrant population resident in Italy (Statistical Report about Migration, IDOS 2017).

The novel focus of this paper on migrants, a largely overlooked group in studies of childbearing behavior in relation to the business cycle, suggests that multiple sources of socioeconomic vulnerabilities interact in determining family decisions during economic downturns. More research is needed in the field addressing how these ascertained disadvantages in contemporary societies expands and cumulate during periods of economic turmoil and how in turn they affect key demographic processes and family dynamics such as childbearing.

Acknowledgments

The authors acknowledge the financial support provided by the European Union's Horizon 2020 research and innovation programme / ERC Grant Agreement No 725961 (EU- FER project "Economic Uncertainty and Fertility in Europe," PI: Daniele Vignoli). This research was also supported by the Linnaeus Center on Social Policy and Family Dynamics in Europe - Spade (grant registration number 349-2007-8701); the Swedish Research Council for Health, Working life and Welfare (FORTE), grant number 2016-07105 and 2018-00310 and the Swedish Initiative for Research on Microdata in Social Science and Medical Sciences (SIMSAM), grant 340-2013-5164.

Appendix

Table A1: Descriptive statistics.

Variables	Italy		Sweden	
	Mean/proportion	N	Mean/proportion	N
Childbirth		111,608		2,320,280
<i>Yes</i>	13.57%	15,146	15.48%	359,298
<i>No</i>	86.42%	96,452	84.52%	1,960,982
Age	30.62	111,608	33.52	2,320,280
Educational Level		111,608		2,320,280
<i>Low</i>	36.88%	41,161	14.90%	345,680
<i>Medium</i>	48.18%	53,772	40.74%	945,167
<i>High</i>	14.94%	16,675	42.34%	982,473
<i>Missing</i>	-	-	2.02%	46,960
Parity		111,608		2,320,280
<i>Childless</i>	57.02%	63,639	41.66%	966,622
<i>Parent</i>	42.98%	47,969	58.34%	1,353,658
Civil Status		111,608		2,313,173
<i>Unmarried</i>	49.76%	55,536	36.40%	841,943
<i>Married</i>	43.87%	48,962	55.64%	1,287,239
<i>Sep./Wid./Div.</i>	6.37%	7,110	7.96%	183,991
Wave		111,608		2,320,280
2009	52.60%	58,705	49.49%	1,148,394
2012	47.40%	52,903	50.51%	1,171,886
Migrant Status		111,608		183,991
<i>Native</i>	86.35%	96,374	81.60%	1,893,461
<i>Migrant <10yrs</i>	7.50%	8,371	9.08%	210,602
<i>Migrant >10yrs</i>	6.15%	6,863	9.23%	214,166
Nuts1		111,608		2,320,280
<i>North(IT) / East(SW)</i>	43.77%	48,851	39.04%	905,880
<i>Center(IT) / South(SW)</i>	16.17%	18,047	43.54%	1,010,251
<i>South(IT) / North(SW)</i>	40.06%	44,710	17.42%	404,149
Employment Status		111,608		2,320,280
<i>Unstable Career</i>	29.18%	32,566	35.27%	818,292
<i>Employed >3yrs</i>	35.74%	39,885	50.19%	1,164,439
<i>Unemployed >3yrs</i>	1.86%	2,077	11.43%	265,166
<i>Inactive >3yrs</i>	33.22%	37,080	3.11%	72,383
ISCO (Grouped)				1,164,439
<i>Self-Employed</i>	18.18%	7,253	4.20%	48,906
<i>Managers/Directors</i>	9.43%	3,763	24.96%	290,643
<i>Clerks</i>	55.46%	22,122	62.33%	725,795
<i>Workers</i>	16.92%	6,747	8.51%	99,095

Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Table A2: Linear probability model of having a child by parity in Sweden and Italy.

Variables	Childless				Mothers			
	Sweden		Italy		Sweden		Italy	
	<i>N</i> = 966,622		<i>N</i> = 63,644		<i>N</i> = 1,353,658		<i>N</i> = 47,964	
	Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
Age	-0.009	0.000	-0.004	0.000	-0.032	0.000	-0.021	0.000
Age Squared	-0.001	0.000	-0.001	0.000	0.001	0.000	0.000	0.000
Education								
<i>Medium</i>	-0.032	0.000	-0.016	0.000	0.009	0.000	0.033	0.000
<i>High</i>	-0.008	0.000	0.003	0.554	0.081	0.000	0.142	0.000
Civil Status								
<i>Married</i>	0.253	0.000	0.364	0.000	0.001	0.754	0.017	0.060
<i>Sep./Div./Wid.</i>	0.041	0.000	0.064	0.000	-0.016	0.000	-0.041	0.000
Wave								
2012	-0.003	0.000	0.002	0.426	0.003	0.000	0.008	0.084
Migration Status (Ref. Native)								
<i>Migrant < 10yrs</i>	-0.011	0.000	0.013	0.237	0.027	0.000	-0.024	0.069
<i>Migrant > 10yrs</i>	-0.036	0.000	0.007	0.567	-0.001	0.201	-0.020	0.065
Wave 2012*Migrant								
2012*Migrant <10yrs	-0.010	0.000	-0.008	0.569	-0.003	0.233	0.002	0.873
2012*Migrant >10yrs	-0.004	0.121	-0.029	0.087	0.000	0.829	0.000	0.976
Residence (Ref. South Se / North It)								
<i>East Se / Center It</i>	-0.009	0.000	-0.003	0.531	0.010	0.000	0.000	0.956
<i>North Se / South It</i>	0.004	0.000	-0.015	0.000	-0.009	0.000	-0.015	0.001
Intercept	0.257	0.000	0.113	0.000	0.203	0.000	0.269	0.000

Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Table A3: Linear probability model of having a child by migration status in Sweden and Italy. Interaction model with employment status.

Variables	Natives				Migrants			
	Sweden		Italy		Sweden		Italy	
	<i>N</i> = 1,893,461		<i>N</i> = 96,370		<i>N</i> = 426,819		<i>N</i> = 15,238	
	Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
Age	-0.012	0.000	-0.009	0.000	-0.015	0.000	-0.010	0.000
Age Squared	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000
Education								
<i>Medium</i>	-0.002	0.012	0.000	0.977	0.003	0.034	0.001	0.943
<i>High</i>	0.051	0.000	0.053	0.000	0.027	0.000	0.039	0.003
Parity (Ref. Childless)								
<i>Parent</i>	0.084	0.000	-0.074	0.000	0.077	0.000	-0.031	0.004
Civil Status								
<i>Married</i>	0.031	0.000	0.270	0.000	0.151	0.000	0.163	0.000
<i>Sep./Div./Wid.</i>	-0.000	0.785	0.153	0.000	0.068	0.000	0.028	0.013
Migration Status (Ref. Migrant<10yrs)								
<i>Migrant>10yrs</i>					-0.033	0.000	-0.019	0.013
Wave								
2012	0.033	0.000	0.019	0.000	0.019	0.000	-0.002	0.896
Residence (Ref. South Se / North It)								
<i>East Se / Center It</i>	0.001	0.005	0.001	0.790	0.000	0.639	0.001	0.935
<i>North Se / South It</i>	-0.002	0.003	-0.017	0.000	0.001	0.635	-0.036	0.000
Employment Status (Ref. Employed)								
<i>Unstable Careers</i>	0.078	0.000	-0.021	0.000	0.063	0.000	0.018	0.181
<i>Unemployed</i>	0.019	0.000	-0.063	0.000	0.081	0.000	-0.076	0.041
<i>Inactive</i>	0.025	0.000	-0.012	0.010	0.023	0.000	0.112	0.000
Interaction 2012*Employment Status								
2012*(<i>Unstable Careers</i>)	-0.074	0.000	-0.015	0.024	-0.039	0.000	0.006	0.733
2012* <i>Unemployed</i>	-0.028	0.000	-0.027	0.090	-0.013	0.000	0.073	0.151
2012* <i>Inactive</i>	-0.027	0.000	-0.023	0.000	-0.021	0.000	-0.013	0.504
Intercept	0.142	0.000	0.128	0.000	0.138	0.000	0.143	0.000

Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

**Table A4: Linear probability model of having a child in Sweden and Italy.
Women employed for at least 3 years.**

Variables		Sweden <i>N</i> = 1,178,321		Italy <i>N</i> = 39,885	
		Coeff.	p	Coeff.	p
Age		-0.014	0.000	-0.005	0.000
Age Squared		-0.001	0.000	-0.002	0.000
Education					
	<i>Medium</i>	0.004	0.000	0.023	0.000
	<i>High</i>	0.075	0.000	0.084	0.000
Parity (Ref. Childless)					
	<i>Parent</i>	0.029	0.000	-0.061	0.000
Civil Status					
	<i>Married</i>	0.021	0.000	0.218	0.000
	<i>Sep./Div./Wid.</i>	0.038	0.000	0.099	0.000
Wave					
	<i>2012</i>	0.032	0.000	0.016	0.001
Migration Status (Ref. Native)					
	<i>Migrant < 10yrs</i>	-0.002	0.590	-0.051	0.000
	<i>Migrant > 10yrs</i>	-0.010	0.000	-0.000	0.099
Wave 2012*Migrant					
	<i>2012*Migrant <10yrs</i>	-0.018	0.000	-0.028	0.122
	<i>2012*Migrant >10yrs</i>	-0.006	0.001	-0.014	0.430
Residence (Ref. South Se / North It)					
	<i>East Se / Center It</i>	0.005	0.000	0.007	0.244
	<i>North Se / South It</i>	-0.006	0.000	-0.026	0.000
Intercept		0.141	0.000	0.142	0.000

Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

Table A5: Linear probability model of having a child by migration status in Sweden and Italy. Interaction model with type of occupation. Women employed for at least 3 years.

Variable		Natives				Migrants			
		Sweden		Italy		Sweden		Italy	
		<i>N</i> = 851,641		<i>N</i> = 35,339		<i>N</i> = 326,680		<i>N</i> = 4,546	
		Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
	<i>Age</i>	-0.014	0.000	-0.004	0.000	-0.014	0.000	-0.008	0.000
	<i>Age Squared</i>	-0.001	0.000	-0.002	0.000	-0.000	0.000	-0.001	0.000
Education									
	<i>Medium</i>	0.004	0.009	0.021	0.001	0.004	0.073	0.005	0.705
	<i>High</i>	0.065	0.000	0.000	0.000	0.043	0.000	0.040	0.043
Parity (Ref. Childless)									
	<i>Parent</i>	0.032	0.000	-0.067	0.000	0.010	0.000	-0.027	0.108
Civil Status									
	<i>Married</i>	0.014	0.000	0.231	0.000	0.061	0.000	0.130	0.000
	<i>Sep./Div./Wid.</i>	0.003	0.001	0.119	0.000	0.024	0.000	0.011	0.435
Status (Ref. Migrant<10yrs)									
	<i>Migrant>10yrs</i>					-0.007	0.000	0.028	0.031
Wave									
	<i>2012</i>	0.016	0.000	0.041	0.001	0.008	0.011	-0.006	0.707
Residence (Ref. South Se / North It)									
	<i>East Se / Center It</i>	0.003	0.000	-0.005	0.377	0.002	0.139	0.002	0.878
	<i>North Se / South It</i>	-0.006	0.000	-0.022	0.000	0.001	0.705	-0.033	0.018
ISCO (Ref. Workers)									
	<i>Self-Employed</i>	0.075	0.000	0.009	0.369	0.076	0.000	0.075	0.028
	<i>Managers</i>	0.040	0.000	0.044	0.007	0.048	0.000	0.081	0.205
	<i>Clerks</i>	0.014	0.000	0.030	0.001	0.014	0.000	0.001	0.977
Wave 2012*ISCO									
	<i>2012*Self-Employed</i>	-0.013	0.000	-0.019	0.248	-0.005	0.436	-0.037	0.382
	<i>2012*Managers/Directors</i>	0.016	0.000	-0.045	0.028	0.020	0.000	-0.040	0.610
	<i>2012*Clerks</i>	0.019	0.000	-0.029	0.036	0.019	0.000	0.022	0.393
Intercept		0.124	0.000	0.120	0.000	0.124	0.000	0.106	0.000

Source: Elaboration of the authors based on Swedish Population Registers and Italian LFS.

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