The Impact of the Great Recession on Natives and Migrants' Fertility: A Comparison between Italy and Sweden

Giammarco Alderotti[1], Eleonora Mussino[2], Chiara Ludovica Comolli[2]

[1] Sapienza – University of Rome, [2] SUDA – University of Stockholm

Introduction

This study contributes to the empirical research on the link between the Great Recession and the fertility decline registered in many European countries in the last decade, adopting a comparative perspective. The aim is to compare childbearing behavior between natives and migrants in two very different contexts: Italy and Sweden. It has been argued that the recent economic downturn affected fertility negatively, through increasing unemployment and rising insecurity in the labor markets (Goldstein et al., 2013; Comolli, 2017). Nevertheless, this issue has scarcely been addressed focusing on the conditions of migrants, which, as a vulnerable group, are more exposed to economic shocks facing higher economic and employment uncertainty (Sobotka et al., 2011). The first contribution of the paper is, therefore, to assess how differently the crisis affected the childbearing behavior of migrants compared to natives. The second contribution of the study is to test whether these differences between migrants and natives, if they emerge, are related to the broader country context.

The Great Recession, occupational choices and fertility

Economic downturns affect childbearing first and foremost through the deterioration of the labor market which materializes through a higher risk of a job loss but also, for those who remain employed, through reduced wages or great contract insecurity (Matysiak et al., 2018). During the recent Great Recession, a rise in precarious employment has been documented in many European countries and elsewhere (see Vignoli et al., 2016). Besides the connection to crisis, different occupations are generally linked to a different propensity to chilbearing (e.g., Begall and Mills, 2012; Martín García, 2010) because of the very diverse working conditions and social settings that may influence the possibility of reconciling work and family life (Ohlsson-Wijk, 2015). Different occupations affect fertility through different mechanisms. On the one hand, some occupations (usually well-paid jobs and public sectors) provide an economically secure basis for family formation through earnings that alleviate the direct cost of childbearing, and through employment security (*economic parenting*). On the other hand, some other occupations (usually female dominated, caring or teaching oriented occupations) allow special conditions such as flexible work hours, reduced work hours or work arrangements, which directly translates in a higher fertility for individuals who want to perform care for their own children (*practical parenting*) (Låppegard et al. 2011). In this context, looking at the moderating role of the welfare state in the relationship between occupational type and fertility is fundamental.

Labor market and fertility of migrants vs natives

Empirical evidence from most country contexts supports the hypothesis that immigrants are disadvantaged in the labor market with respect to natives, but it is more mixed with respect to the differences between migrants and natives for fertility choices in response to employment insecurity. Immigrants are more likely to occupy lower status occupations than natives (Milewski, 2009) and to experience downward social mobility in terms of occupation, income and housing conditions (Constant and Massey, 2005).

Considering the Eurostat latest statistics (2016, not shown), immigrants are over-represented in the shares of part-time and temporary workers, which means that they have a more insecure labor market attachment compared to natives. Nevertheless, Italy and Sweden are characterized by two really different labor markets, in which immigrant workers and women's participation change deeply. Female labor force participation is systematically lower in Italy than in Sweden, but in Italy the percentage of foreign-born women in the labor force is always higher than the one of native women, while the opposite holds for Sweden (OECD, various). Thus, given two such diverse contexts, we expect that different policy settings can generate "different incentives and negotiation positions between parents, which may have different implications in immigrant families" (Tervola et al., 2017, p. 270). According to the literature, the evidence concerning the relationship between labor market conditions and fertility behavior among migrants is controversial and context-dependent. On the one hand, studies on the US find that immigrant women, compared to natives, have lower fertility if employed and that immigrant women with a good job tend to reduce their family size, due to the fear of losing their high-status jobs (Massey 1981; Bean and Tienda, 1990). On the other hand, however, Dupray and Pailhé (2018) find that in France the effect of precarious employment is positive for immigrants and negative for native, while in Germany immigrants react to precarious labor market circumstances in a similar manner to natives (Milewski, 2007). Findings about Sweden are somehow clearer. Andersson and Scott (2005, 2007) find a positive association between women's labor force participation and transition to motherhood for immigrants. The authors, in accordance with other scholars, explain this result through the Swedish welfare state, which gives immigrants the same formal rights as the native-born individuals in Sweden once that they have got a permanent residence permit.

The literature about occupational condition and fertility among Italian immigrant population is almost non-existent (Ortensi, 2015). Most previous research addressing the Italian population (i.e., without considering migrants specifically) finds evidence of a negative relationship between both female labor force participation and women's increasing earning power, and fertility (Santarelli, 2011; Rondinelli et al., 2010). Being more traditional and having a welfare state more oriented towards the principle of familism as opposed to the universalism and individualism of Sweden, Italy is expected to display a different, if not opposite, relationship between occupational status and childbearing.

Data and methods

We analyze the effect of the Great Recession on fertility at the micro-level. For Italy we use the Labor Force Survey (LFS), while Swedish data come from a collection of the national population registers processed by Statistics Sweden and called "Sweden over Time: Activities and Relations" (STAR). Our samples is composed of native and migrant women in reproductive age resident in Italy and in Sweden in 2009 and in 2012 (2015 in the final version of this study when the Swedish data will be available) for whom we look at the retrospective childbearing and occupational history to compare childbearing behavior before and after the Great Recession.

The objective of the study is to assess how the probability of childbirth is associated to those women's type of occupation. Since in the LFS the exact birth dates of children are not known but we do know their age, we can assess whether there is a child in the age range 0-2 residing in the household. This allows the identification of the women who had – or had not – a child within the last 2 years before the interview, our dependent variable. Since complete individual working histories are not available for individuals who changed job recently, the only way of measuring the occupation women had before having a child is to focus on women who had the same job for the last three years, to account for the time since conception. For this category of women, information about the type of occupation, contract and wage during the period in which they may have had the child is available. In order to perform a proper comparison, the same selection of women is operated on the Swedish register data. We manage to include dependent workers, self-employed and for Sweden, both public and private employees.

By focusing only on women employed in the last three years, we incur in a sample selection issue. While we acknowledge the limitations of this choice even though we deal with that as carefully as possible using a Heckman selection model, we also argue that this choice is advantageous for our study: we are able to perform a better comparison of the two welfare states because we are considering women who certainly have access to the welfare protection in both countries, while unemployed or inactive women especially in Italy, may not have access to all benefits (e.g., parental leave) (Kil et al., 2018).

However, as mentioned, observing the connection between employment and childbearing only for individuals who have had the same job over the last three years, might lead to incorrect estimates of the effect because the sample is not randomly selected. The non-random selection of the sample is itself linked to out outcome, childbearing. We correct for such potential selection bias by using the Heckman model (Heckman, 1977), a two-stages model where the first equation (*selection equation*) is used to measure the probability of being selected into the sample and the second equation (*outcome equation*) estimates the effect properly correcting for the selecting probability. Our exclusion restriction variable is the proportion of women with tertiary education at the regional level. We expect this variable to influence the labor market and thus to affect the probability of being employed for at least three years, but not to be related to the individual probability of having a child.

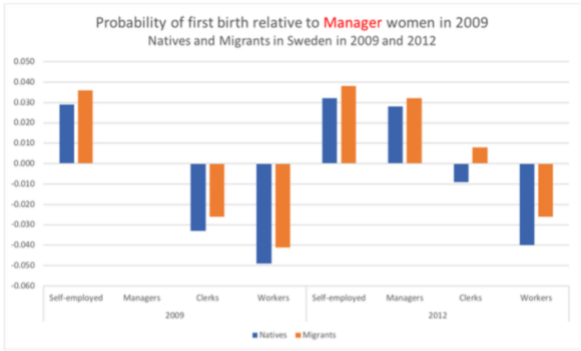
We run identical but separate analyses for the two countries pooling data together for the two periods. We use a probit model for the selection equation and a linear probability model (LPM) for the outcome. The main explanatory variables are: a categorical variable for women's background (natives, foreign-born arrived more than 10 years before the observation or in the last 10 years), a period dummy for the post-crisis period (2012) and the interaction between the two, so that we can measure the period effect on the two groups, namely how much the likelihood of childbearing changes during the crisis across the origin groups. Finally, we add the occupational categories measured as a categorical variable for social class (self-employed, managers, clerks, workers) for dependent workers plus a category for the self-employed.

Preliminary results and next steps

As shown in Table 1, the probability of having a child in 2012 is higher than in 2009, in general. Nevertheless, such effect was much lower for migrants arrived in Sweden less then 10 years earlier, while in Italy fertility decreased for all migrants, regardless their length of stay. As regards the role of occupations, the chart represents the probability of having a child for the different classes of workers in 2009 and 2012 (with respect to the childbearing probability of a manager in 2009). It shows that the probability of having a child has changed differently across occupations, and between the two countries.

Table 1	Sweden		Italy	
2012 vs 2009	0.031	***	0.016	***
Migrants (<10yrs ago) *ref.natives*	0.008	***	-0.040	***
Migrants (>10yrs ago *ref.natives*	-0.005	***	-0.026	**
2012*migrants(<10yrs)	-0.017	***	-0.044	***
2012*migrants(>10yrs)	-0.008	***	-0.009	

Heckman selection model – we controlled for age, age squared, education, civil status and parity. *** p<0.01; ** p<0.05



Our next steps involve testing if within occupations the effect is heterogeneous across wages and if there are differences according to the country of origin of migrants.

Key references

- Begall, K., & Mills, M. C. (2012). The influence of educational field, occupation, and occupational sex segregation on fertility in the Netherlands. European Sociological Review, 29(4).

- Ohlsson-Wijk, S. (2015). Type of occupation and the transition to parenthood in Sweden. *Stockholm Research Reports in Demography, 11*.

- Goldstein, J. R., Kreyenfeld, M., Jasilioniene, A., & Örsal, D. K. (2013). Fertility reactions to the "Great Recession" in Europe: Recent evidence from order-specific data.

- Andersson, G., & Scott, K. (2005). Labour-market status and first-time parenthood: The experience of immigrant women in Sweden, 1981–97. Population studies, 59(1), 21-38.