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Is permanent employment, during the years of the Great Recession, a fertility trigger in Southern Europe?

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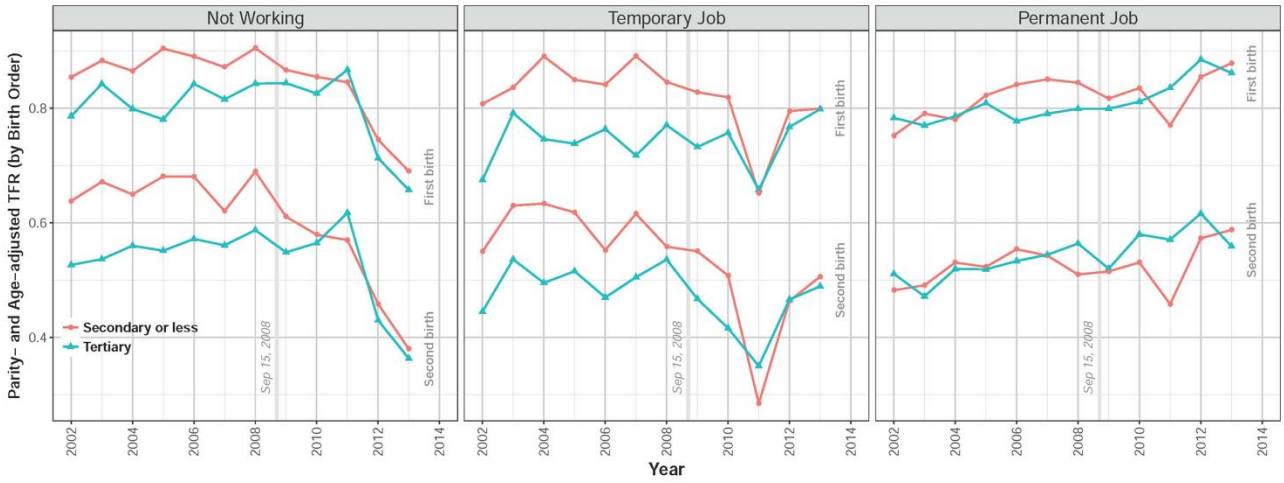
Abstract:
This paper aims to study how working condition affect the timing of family formation and reproductive dynamics in Southern Europe during the recent economic crisis. The focus is on the region of Andalusia, an area of Spain that like the entire Country during the last decades has reached a very low level of fertility. According to Ramiro and colleagues (2017), Andalusia during the Great Recession has shown a strong reduction in the reproductive behavior even if the decline has particularly affected unemployed with weak economic security while women with a permanent job have experimented an increase in the likelihood of having a child. Using a micro analytical approach based on Event History Analysis technique we will test the hypothesis that a permanent employment has a positive effect on the timing of fertility, especially at advanced reproductive ages.

Long abstract:
The negative association between fertility and economic development has been one of the drivers of the decline in fertility in many parts of the world (Lee, 2003), a condition that has led to levels of the replacement threshold (2.1 children per woman) many countries in the world (Wilson, 2004).
For the recent period, the scientific literature has emphasized the negative effect of economic insecurity on fertility, in the period 1980-2008, for example, the GDP decline is associated with fertility reduction among low-fertility countries (Sobotka et al. 2011). Furthermore, several correlations, often with opposite signs, have emerged: Rindfuss and colleagues (2004), using data from 22 low-fertility Countries, have shown the transition, occurred around the middle of the eighties, from a negative correlation to a positive one between female participation in the labor force and TFR. A positive correlation between economic development and TFT in the last decades has been highlighted (Myrskylä et al 2009) while for many Countries a weakening of the negative relationship between income and birth rates has been detected and, for others, the sign of the relationship has even become positive (Fox et al. 2018). However, the general picture of post-transitional fecundity has seen the unfolding of quite different contexts in terms of: policies, welfare and labor market (Sobotka 2017), circumstances that have shaped dissimilar fertility patterns (Wilson 2013). In times of economic crisis fertility dynamics has drawn great attention of scholars and several studies have investigated the link between uncertainty and fertility, highlighting how this condition generates both the reduction in TFT and an extension of the reproductive times (Sobotka Skirbekk and Philipov 2001; Schmitt 2012; Hofmann and Holmeyer 2012). Moreover, also due to the impact of the crisis in Southern Europe, a large part of the research has focused the attention on Southern Europe (Adsera 2011; Santarelli 2011; Vignoli,

Drefahl, and De Santis 2012) stressing how the crisis has been particularly influential on the reproductive behaviors of younger portion of the population (Goldstein et al., 2013) and how this pattern has been influenced by the low level of social protection of this Area of Europe (Matysiak, Sobotka, Vignoli, 2018). Namkee and Mira (2000), using the Spanish fertility survey carried out in 1991, emphasized, for the decades before the beginning of the Great Recession, a strong negative association between non-employment spells and marriage and a less strong association in the case of part-time or temporal employment; the effect on fertility instead has been much more nuanced. However, despite a delay in the first and second demographic transition (Lesthaeghe, 2014), strong changes have taken place in Spain in recent decades: rapid increase of educational attainment – especially in the case of women – and a strong change of the labor market. Therefore, there is still much to be disentangled: in particular, the reproductive dynamics and processes in a context of high economic uncertainty, a trait that appears typical of many current societies (Matysiak, Sobotka, Vignoli 2018). During the recent economic crisis, as shown by Ramiro and colleagues (2017), Andalusia, the largest Spanish region, has shown a reduction in the reproductive behavior even if the decline has particularly affected women not in working condition and characterized by weak economic security while women with a permanent job experimented an increase in the likelihood of having a child, Figure 1.

Figure 1: Parity and age adjusted TFR by birth order. Andalusia 2002-2016.



Using a micro analysis approach based on the Event History Analysis technique we will test, for both men and women, the hypothesis that a permanent employment has a positive effect on the timing of fertility, especially for the most advanced age groups. In particular we will focus our attention on different types of Employee Contracts and the entire occupational Career. We will provide parity specific analysis, a crucial factor in the process of fertility dynamics. In order to exclude the association with confounders we control models with a large number of covariates.

Andalusia. The Longitudinal Population Database of Andalusia:

With a population of about eight million (18% of the total population of Spain), Andalusia is the biggest region in the entire Country. In the decades that preceded the economic crisis, Andalusia has shown higher fertility levels than the rest of the Country (about 0.5 children per woman) even if recently the TFT of the Region converged with the National level, joining, in 2014, 1.4 children per woman (Ramiro et al 2017). The reasons for this convergence are to be found in the rapid changes experienced by the Region in recent years, but also in the high levels of unemployment. Today, Andalusia is among the European regions with the highest incidence of unemployment, a particularly worrying scenario since it regards young people (Eurostat 2018). Indeed, among

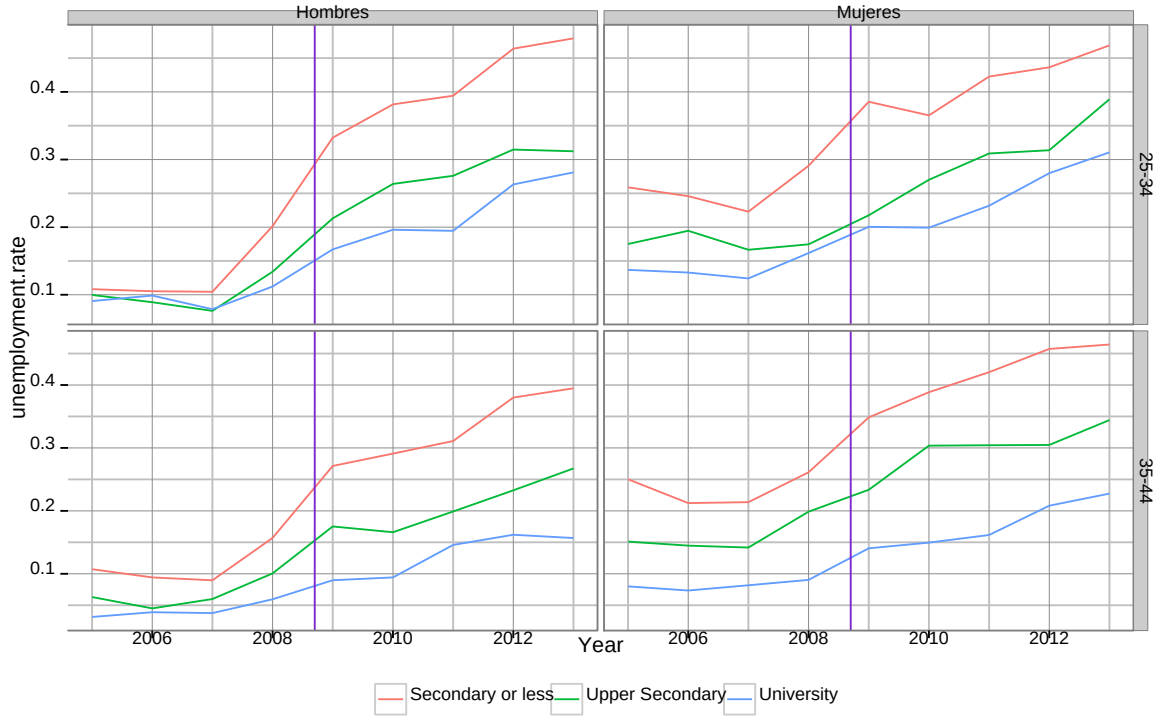
Andalusian women aged 25–44, the unemployment rate is 45 per cent for those with secondary education or less, and is 25 per cent for those with tertiary education (Ramiro et al. 2017).
Andalusia is the only region in Spain that has a longitudinal population database (*Longitudinal Population Database of Andalusia)* that covers the period 1998-2018. In table 1 we propose a Summary of the available data. The database has been developed and managed by the Institute of Statistics and Cartography of Andalusia with the support and technical supervision of the Department of Population Studies of the Institute of Economics, Geography and Demography (IEGD) of the Spanish National Research Council. With Longitudinal Population Database of Andalusia is possible to follow the whole demographic trajectories of the population since the late twentieth century to the latest data available. It is also possible to reconstruct the individual biographies including information on fertility and occupational events for both male and female population. In particular, for all the entire period is possible to include fertility evets and the exact timing of career moves including also geographical mobility, and family related evets.

Table 1: Summary of Data

Around 10 Million different individuals with at least a demographic event registered from 1996 till now.
More than 3.5 Million inter-municipal movements.
More than 9 Million changes of Residence.
More than 1.2 Million deliveries.
Around 1 Million deaths.
More that 1.2 Million individuals who got married.
And around 7.5 Million individuals included in 2001 Census.
Information linked to 1991 and 2011 Censuses.
Cause of death coding following ICD-10, and WHO GBD.

The Longitudinal Population Database of Andalusia not only allows us to follow the demographic trajectories but we have the opportunity to reconstruct the educational attainment and working career of the entire population of the region. In Figure 2 we show the increasing unemployment rate for both men and women.

Figure 2: Unemployment rate by sex, educational attainment and age groups. Andalusia 2002-2016.



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