

Determining factors in the historical decline in marital fertility in Italy

Abstract

The historical decline in fertility in Italy has been studied by scholars from different disciplines who have tried to explain why the reproductive behaviors of Italian women changed over time. This study is designed to find support for traditional, economic-based explanations of the fertility transition against purely behavior- and norm-based explanations popularized by the Princeton European Fertility Project (PEFP). We used an econometric fixed-effects panel model with dummy variables. The paper concludes by placing an emphasis on the influence that changes in living conditions - economic situation and social status - had on couples' decisions to have children. Applying econometric techniques of panel analysis to a database with a long-horizon and a wide variety of socioeconomic variables, we confirmed the validity of the main ideas established in the Demographic Transition Theory that had been challenged by the Princeton European Fertility Project (PEFP).

Key words: Fertility transition; Italy; region level; panel data; socio-economic factors.

1- Introduction

Analysis of the decline in fertility in Italy must start by taking in the broader context, namely that of western industrialized countries that have experienced a similar demographic composition and that have undergone the Demographic Transition. For some decades now, an interesting debate has raged concerning the explanations for the historical decline in fertility. Broadly speaking, the

theories about the decline in fertility fall into two categories: A) adjustment (socioeconomic, demand) theories, which holds that changes in socioeconomic conditions encouraged couples to have smaller families (Carlsson 1966), and B) innovation (diffusionist, ideational) theories, which takes the view that the decline came about as a result of new birth control methods and new ideas about the benefits of having fewer children (Bengtsson and Dribe 2014). Although most scholars accept that both aspects are important, controversy still rages as to which predominates (Bryant 2007).

Some authors understand this phenomenon within a “diffusionist perspective”, in which fertility is apparently linked to the spread of new attitudes and behavior regarding having children. They identify new models of social changes that are imposed through the interaction of individuals in society and the influence of the media (Rogers, 1962; Brown, 1981). This later gave rise to the “innovation diffusion theory” that has to do partially with the adoption of innovative behaviors, but which is also concerned with the spreading of certain attitudes (e.g. concerning the cost-benefit analysis of having children) and behaviors (e.g. birth control technologies) that pass from some sectors of the population to others (Casterline, 2001).

In fact, these changes in behavior – which can be assumed to be caused by several factors in addition to those mentioned above – have spread and become normalized thanks to the presence of three conditions: awareness of the benefits deriving from the adoption of new behaviors (*readiness*), willingness to accept cultural changes (*willingness*) and having access to contraceptive means and measures to put the changes into practice (*ability*). This process of innovation spread within countries through a process of dissemination of new ideas and cultural changes (Coale, 1974; Kurek, Lange, 2012). Furthermore, many scholars consider that it is particularly important to consider this phenomenon within certain geographical areas, in addition to social and cultural contexts. This conclusion also emerged from the analysis conducted within the

Princeton European Fertility Project (PEFP) led by Ansley Coale and Susan Watkins, which states that the decline in fertility occurring during the first demographic transition was most strongly influenced by the spread of innovative behaviors, rather than by adaptation to changes in economic conditions (Coale and Watkins, 1986).

One of the main conclusions reported in the book that summarizes the results of the European Fertility Project was: “At the end of this quest, we cannot report that the historical evidence confirms that the declines of infant mortality led to the decline of fertility” (van de Walle, 1986: 233). In the same volume, Susan Watkins (1986: 436) stated: “The relation between infant mortality and marital fertility was expected to be particularly significant [...] One of the more surprising discoveries was that this expectation was often upset [...] A battery of tests showed little association between I_g [marital fertility] and the infant mortality rate during the late nineteenth and early twentieth centuries. The correlation coefficients that measure this relation are usually not statistically significant and often have the wrong sign”. Many other researchers reached the same conclusions¹. Dirk van de Kaa (1996: 409), in a study on the state of the question regarding the demographic transition and the theory of fertility, concluded: “Notestein’s notion that a mortality reduction would automatically lead to a significant decline in fertility through a series of pre-existing social mechanisms is untenable”.

In Italy, the very rich literature on fertility includes, in addition to the studies conducted by Livi Bacci (1977) within the PEFPP, a detailed set of tables of

¹ In Germany, John Knodel (1974: 167-185) found that marital fertility declined even before infant mortality in half of the administrative areas studied: “It appears that the usual description of the demographic transition which postulate a prior decline in mortality (particularly infant and child mortality) as an initiating cause of fertility decline does not fit the facts in Germany”. In Belgium, Lesthaeghe (1977: 171-76) reached almost the same conclusion: “It is difficult to argue that the drop in infant mortality was among the factors that contributed to the start of the marital fertility transition in Belgium”. Other researchers came to almost the same conclusions, including Michael S. Teitelbaum (1984) for Great Britain, and Michael Haines (1998) for the USA.

fertility and marriage by cohort and period (Livi Bacci et al., 1968; Livi Bacci and Santini, 1969; Ciucci and De Sarno Prignano, 1974; Santini, 1974; Livi Bacci, 1977; De Simoni, 1989). Other more recent studies have “rediscovered” the partially-exploited results of the Fertility Survey of 1961 by introducing multi-collinear models and giving particular emphasis to cohorts, cultural and biographical variables (including age at marriage) and level of education.

Education has been thought to play an important role in fertility rates (Basu, 2002; Ciucci and De Sarno Prignano, 1974). In particular, women’s education appears to have an even more important role than the family economic status if we compare the fertility rate of birth cohorts born at the end of the nineteenth century (Breschi et al., 2013). Even in the period before the demographic transition, socioeconomic differentials in fertility seem to be very small and statistically insignificant (Dribe et al., 2014). In the explanation of cross-country fertility differentials, female employment emerges as important by the late 1980s when Italy, together with the other southern European countries, had low levels of female employment and low levels of fertility compared with northern European countries where the correlation was confirmed in the opposite scenario, namely high levels of both employment and fertility (Vitali and Billari, 2017).

Concerning the causes of fertility decline in Italy, we have a huge literature based mainly on case studies (Breschi and Livi Bacci, 1990; Breschi et al., 2014a; Breschi et al., 2014b), from which a comprehensive analysis concerning the whole country emerges. At micro level particular emphasis has been assigned to the role of the intermediate variables of fertility. High fertility is explained through the presence of constant low levels of female labor participation, the widespread diffusion of strong family ties and family values and the innate presence of Catholic principles and values (Kertzer et al., 2009).

Our study was designed to take advantage of the availability of a big database containing demographic and socio-economic data that covers the