Persistent low fertility. Have Italians forgotten to recover?

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Introduction

Italy is a country with persistent low fertility: TFR dropped dramatically in the early 1990s and since then has not risen above 1.3 children per woman. In fact, the country reached a record low in the mid 1990s, recording a TFR of less than 1.2. Fertility rates since then have gradually increased (for the first time since the baby boom), up to today's current fertility level of 1.35 children per woman (Istat, 2007b).

The moderate yet significant increase in fertility in the last 10 years is further specified by diverse regional patterns. In the northern regions of Italy, period fertility has returned to the levels observed in the early 1980s, in part due to an increasing number of babies born to immigrants (about 10% of overall births), whose fertility is higher than native Italians. Overall, however, there has probably occurred a slight increase in native fertility as well, related to both new forms of family formation among the younger cohorts and to a recovery of postponed births among the older cohorts (today about 15% of births occur outside of wedlock).

In a number of southern regions, on the other hand, period fertility has continued to decline to very low levels. In other southern regions, period fertility levels have recently stabilized, although at levels much lower than those observed in early 1980s.

Even if one considers cohort fertility, rather than looking at period measures, Italian fertility levels still result particularly low. According to the Council of Europe's 2005 Demographic Yearbook, Italy has the lowest total cohort fertility rate (CTFR) in Europe (1.5 for the birth cohort 1965), and there is no indication that the decline in cohort fertility has come to a halt.

In the first part of our paper we present and discuss current developments with regard to fertility in Italy, both at the national and regional levels, using data recently published by the Italian National Institute of Statistics (Istat, 2007a).

We use a cohort approach, showing changes both in CTFR and in the timing of births for the 1950-1980 cohorts. We also apply the model proposed by R. Lesthaeghe (2001) to evaluate the intensity of fertility recover and postponement.

In the second part of our paper, we focus on "late fertility" (entry into motherhood after the age of 35), using individual level data from the 2003 Istat multipurpose survey on the family "*Famiglia e soggetti sociali*". We investigate both the determinants of postponement (or the propensity to reach age 35 without having had a child) as well as the determinants of recovery (or the propensity to subsequently have a child for those women who reach age 35 with parity zero and parity one).

Macro level: a descriptive picture of regional Italian fertility

Sources and methods

Regional level age specific fertility rates analyzed in this short paper have been recently published by ISTAT. They come from two different sources: *Stato Civile*, which registers births from the actual (*de facto*) population for the years 1952-1998, and *Anagrafe*, which records births from the resident (*de jure*) population, for the years 1999-2005.

By aggregating cross-section data at a cohort level, the complete age schedule of fertility is available for the 1937-1956 cohorts, while it is censored for cohorts born in 1957-1980. We also estimate the final part of the reproductive history for 1957-1968 cohorts.

The different patterns of fertility in northern and southern Italy

A comparison of the fertility schedules of women living in northern and southern Italy again reveals two distinct patterns.

Women born in 1970, 1975, and 1980 in the northern regions of Italy are similar with regard to the first part of their reproductive life. Women born in 1960, on the other hand, began having children at an earlier age. However, overall CTFR for the different cohorts may be similar, given that the younger cohorts seem to recover fertility levels after the age 30 (beginning childbearing later).

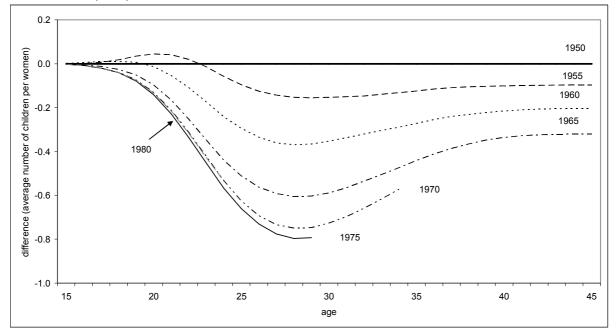
In the southern regions, the fertility of the 1970 cohort is much lower than that of the 1960 cohort. For the 1975 and the 1980 cohorts, this decline continues – even if it is less dramatic – and the timing of fertility begins only slightly later.

The process of fertility recovery in northern Italy becomes more visible when comparing the cumulated cohort fertility rates (CCFR) up to age x for the 1950-1980 cohorts (Figures 1 and 2). We take the cohort born in 1950 as our base and then compare its cumulated fertility to that of the younger cohorts (Frejka and Calot, 2001).

The analysis of CCFR shows a recovery of fertility in northern Italy by the 1960 and 1965 cohorts compared to the 1950 cohort (Figure 1). In northern Italy the difference in CCFR between the 1950 and the 1965 cohort decreases from a maximum of -0.35 child per women at age 29 to -0.20 at age 49, and between the 1950 and 1960 cohort from -0.59 child per women at age 29 to -0.32 at age 49.

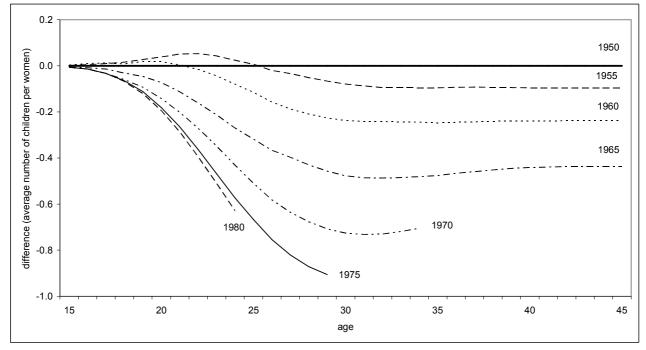
Furthermore, a comparison within the same northern regions of the 1980 cohort, to the 1970 and 1975 cohorts shows negligible differences.

Figure 1. Differences in CCFR between base and subsequent cohorts: Northern Italy, women born in 1950 (base) and 1955-1980.



In southern Italy, the recovery of fertility is almost nonexistent for the 1960 and 1965 cohorts when compared to that of the 1950 cohort. Fertility also declines from the 1970 to the 1975 cohort. It is only for the 1980 cohort that the decrease in fertility seems to slow, when compared to the cohort born five years earlier (see Figure 2).

Figure 2. Differences in CCFR between base and subsequent cohorts: Southern Italy, women born in 1950 (base) and 1955-1980.



A further evaluation of fertility postponement and recover in Italy and in its macro region using the model proposed by Lesthaeghe (2001) is presented. We compare the intensity of these two processes in Italy with other six European countries. Results show that in northern Italy recover is at similar levels of Austria and Germany, while in southern Italy recover is still in an early phase.

Micro level analysis: provisional results

In the second part of our paper, we focus on "late fertility" (entry into motherhood after the age of 35) using individual level data. We investigated both the determinants of postponement (or the propensity to reach age 35 without having had a child) as well as the determinants of recovery (or the propensity to subsequently have a child for those women who reach age 35 with parity zero).

We found, as expected, that the propensity to remain childless until one's late 30s has gradually increased among the more recent generations, particularly with regard to the more educated women.

With respect to our analysis of fertility recovery, our results show an increase in the quota of women who have children after age 35. We also see an increase, however, in the number of women who reach 40 years of age without ever having had a child (and thus are potentially definitively childless).

The results from the application of a multiprocess model seem to confirm the timid beginnings of a reversal in fertility decline. This is in large part due to the increasing likelihood of fertility recovery after the age of 35 by those women among the youngest generations who hold a university degree. This recovery goes through education, not work experience, whose effect is not significant.

Our hypothesis, which is in part empirically supported by the data, is that ever more women who hold a university degree among the youngest generations will postpone forming a family in order to invest in their personal development and professional careers. These women, however, will then have the possibility to recover fertility in their late 30s.

Our analysis here has been limited to first births. Low fertility in Italy, however, is largely due to the fact the couples have no more than one child. In a further stage we intend, then, to also analyse the propensity to reach age 35 with only one child as well as the determinants of recovery concerning the second child (i.e. the propensity to subsequently have a child for those women who reach age 35 with parity one).

References

ISTAT (2007a). Età media della madre al parto, numero medio di figli per donna (Tft) e tassi specifici di fecondità per età della madre, per provincia – Anno di iscrizione 2005. Available on line at «<u>http://demo.istat.it</u>». ISTAT (2007b). Indicatori demografici per l'anno 2006, stime Now Cast. Available on line at «<u>http://demo.istat.it</u>».

Lesthaeghe R. (2001). Postponement and recuperation: Recent fertility trends and forecasts in six Western European countries. Paper presented at the IUSSP Seminar "International perspectives on low fertility: Trends, theories and policies, Tokyo, 21-23 March 2001. Available on line at: http://www.vub.ac.be/SOCO/Lesthaeghe.htm».

Frejka T. and Calot (2001). Cohort reproductive patterns in low-fertility countries. Population and Development Review, 27, 103-132.