**Introduction**

Very low fertility has become a structural characteristic of the demographic regime of Greece in recent years. The combination of a later timing of fertility with less intensity has led to very low period total fertility rates (around 1.3 children per woman) that have persisted for over a decade now. In fact, lower numbers of children as compared to the past and increasing age-specific fertility rates for women aged 30 or more are the main features of recent trends in reproduction. Low levels in period fertility in the 1990s and the early 2000s, are mainly the result of a combination of three elements. Firstly, fertility rates for the 30 to 39 age group stopped declining in that period and started inreasing. Secondly, fertility for women aged 25 to 29 increased slightly and thirdly, fertility for younger women (below age 25) continued to fall. There can be no doubt that these developments reflect, to a great extent, changing age-patterns of childbearing for successive generations. In a context where the total number of children born by various female cohorts is, on average, around 2, either fertility is high for younger women and low thereafter, or women below age 25 postpone childbearing and age-specific fertility rates are high for older women. When, in addition to that, changes in the age pattern of fertility are combined with those in the average number of births from the one cohort to the next, the trends in the Total Fertility Rate become quite pronounced over time. In fact, there are two elements likely to explain why TFRs continue to remain at a very low level. The first, which seems to prevail in Greece for the cohorts born in the late 1950s or afterwards, is related to the "tempo" of fertility (i.e. a postponement of fertility on the part of younger women followed by a resumption in older ages). The second one is the result of changing "quantum" of fertility, as cohort fertility declines over time (from 2 children per women born in the early 1950s to roughly 1,7 children for women born in the late 1950s or afterwards).

At the same time, changes in education patterns are of growing importance. The educational gap between men and women has almost disappeared as the number of years people devote to their education has increased recently much more for women than for men. Differences among successive female cohorts are pronounced as a result of the increasing participation rates in education for younger women. In fact, in the early 1970s women were expected to spend 10.1 years of their lives (between the ages of 5 and 34) in education. The corresponding figures for the early 1980s were 10% higher (11.1 years). A further increase in school life expectancy was observed in the 1990s leading to a level of 12.6 years. These developments are also reflected in different levels of educational attainment for different age groups. In 2000, the level of educational attainment for women aged 25 to 29 for the upper-secondary and tertiary education was respectively 1.4 and 1.3 times higher than that of the women aged 30 to 49. The educational gap is clearly more pronounced when the youngest age group (25 to 29 years) is compared with the oldest one (50 to 64 years). In the first age group the level of educational attainment is 2.8 and 3.7 times higher than in the second one for the upper-secondary and tertiary education respectively. It is worth noting that, this generation gap regarding female education clearly differentiates Greece from the EU-15 average where the corresponding figures (for the youngest and the oldest age group) were 1.5 and 2.2 in 2000.

**Objectives:**

This paper aims at exploring the relationship between increasing educational level of women in Greece and declining fertility in the recent past. The impact of education on fertility patterns is analysed using the cohorts of women born between 1950 and 1970. The analysis focuses both on the changing tempo and quantum of fertility. As far as timing of fertility is concerned we are interested in the onset of fertility, i.e. "age at first birth", as well as the birth interval between first and second birth by the highest educational qualification attained by those women.
As far as educational attainement is concerned we are mostly interested in women with at least a higher educational qualification. Thus, women are divided into four categories: a) those who have obtained a PhD, b) those with a Master's degree, c) a University degree, and d) those with other higher education. These women will be compared to those with fewer qualifications (i.e. no higher education at all).

**Data and Methods:**

The data used for the above analysis are population data collected in the most recent Greek Census in 2001. In particular, we use data on the "numbers of children ever born" and the "highest educational qualification attained" by Greek women by year of birth of those women. If a comparison with other sources is likely to give an added value to the above analysis, use will be made of the relevant data from the 1999 Family and Fertility Survey of Greece.

We take advantage of a big national dataset (i.e. the Greek Census) to break down educated women into small groups with sufficient numbers to analyse without any of the usual biases arising from the small sample size of a survey. The analysis focuses mainly on first birth timing according to the level of education for the different cohorts of women, but we are also interested in higher birth order. We intend to estimate simple straightforward demographic measures, i.e. mean age at first and second births, as well as birth probabilities by birth order, and compare them for the different educational levels and the differrent cohorts of women.  Thus, we hope to identify changes in the age-pattern of fertility for the different cohorts of women for a certain educational level as well as differences among women of a certain cohort according to their educational qualifications.

 As far as quantum of fertility is concerned, completed cohort fertility can be calculated only for women who have reached the end of their reproductive lives by 2001. Such women are those who were born before 1955 while those born before 1960 have probably reached a level of fertility very close to the one their cohort will eventually achieve. Women born after 1960, however, in 2001 are still in the course of their active reproductive lives, particularly if childbearing for those women tends to be late. Thus, to enable comparability between the different cohorts, an estimate of the quantum of fertility will be obtained, using as indicator "fertility attained by certain age".

**Discussion:**

For women of a particular cohort, we expect that the more educated a woman is the later is the onset of fertility and the longer the interval between first and second births. In addition, we expect fewer births to more educated women, particularly as far as second and third births are concerned. For the different cohorts, we expect to observe a change in the age-pattern of fertility within a certain level of education, towards later and less fertility for the most recent cohorts.

Such an analysis of fertility patterns for different cohorts of women by educational attainment has never been done before for Greece. We expect that analysis to shed some light on how the stagnation of fertility at very low levels in the past 15 years is related to increasing proportions of women in upper secondary and tetriary education and their delayed childbearing. We also hope that the analysis will provide some means to predict future levels and trends in fertility.