

## **Facts and Factors on Low Fertility in Southern Europe**

The Case of Spain

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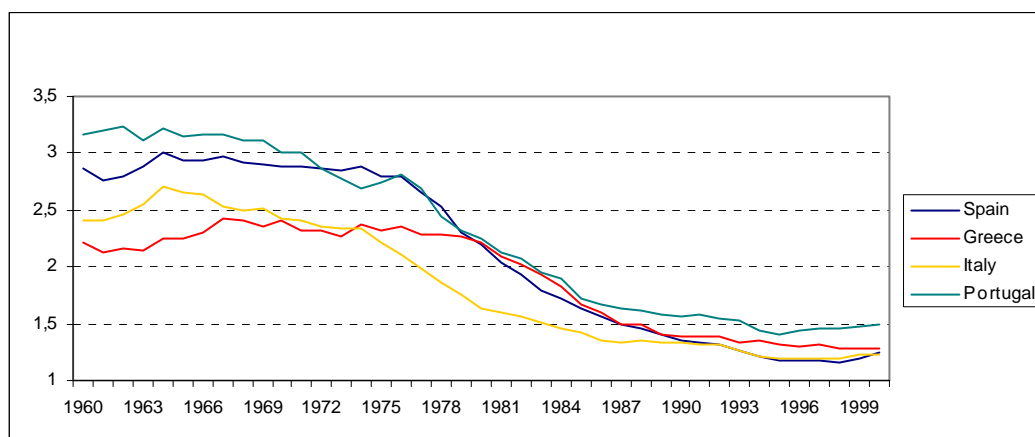
During the final decades of the 20th Century, the countries in Southern Europe now belonging to the European Union (Italy, Spain, Portugal and Greece) have experienced dramatic changes in all the demographic variables. Until the seventies, their mortality had been clearly worse than the European average, while nowadays their inhabitants enjoy a life expectancy ranking among the world's highest, especially for females. On the other hand, for centuries, the four countries had been the origin of substantial flows of outmigrants going mainly to the New World, while between World War II and the crisis of the seventies the migrants changed destinations and went in great numbers to prosperous European countries. After 1975, this also changed and Southern Europe progressively became a land of attraction: migratory flows reversed, former migrants returned home and increasing flows of non-European migrants started changing the human landscape of these societies of highly homogeneous ethnicity.

No matter how important the changes in mortality or in migration may have been, it is not because of them that Southern Europe is now under the microscope of demographers, but because of the sharp decline in fertility experienced during the seventies, the extremely low levels attained and the length of time these levels have prevailed. In fact, never has such a large region, with a population of over 120 millions, experienced such a low fertility for more than two decades. Recently, some new regions seem to be following in the steps of Southern Europe, such as countries in Eastern Europe, in former USSR and in Eastern and Southeast Asia. Some of them even show rates below the present data for Southern Europe and keep decreasing. Nevertheless, Southern Europe still holds the title for being considered the classical case in the study of what some authors call *lowest low* fertility, defined by a Total Fertility Rate under 1.3.

Among the four countries considered, Spain offers the most extreme example. As shown in Figure 1, comparing fertility levels, Spain's TFR amounted 2.8 to 3 children per woman throughout the period 1960-1975, well above the European average and substantially higher than the Italian and Greek fertility rates. Two decades later, in 1995, the TFR in Spain was 1.16, the lowest in the world that year as happened repeatedly during the nineties. Therefore, the decline of fertility in Spain was the sharpest and the level reached the lowest ever.

From here on, to avoid getting lost in comparisons of cases that are really quite similar, only the case of Spain will be presented. In most aspects, though, the facts and factors mentioned for Spain might be generalised to the other three countries, Italy usually being the closest and Portugal the most unusual.

Figure 1. Total Fertility Rates in Southern Europe. 1960-2000

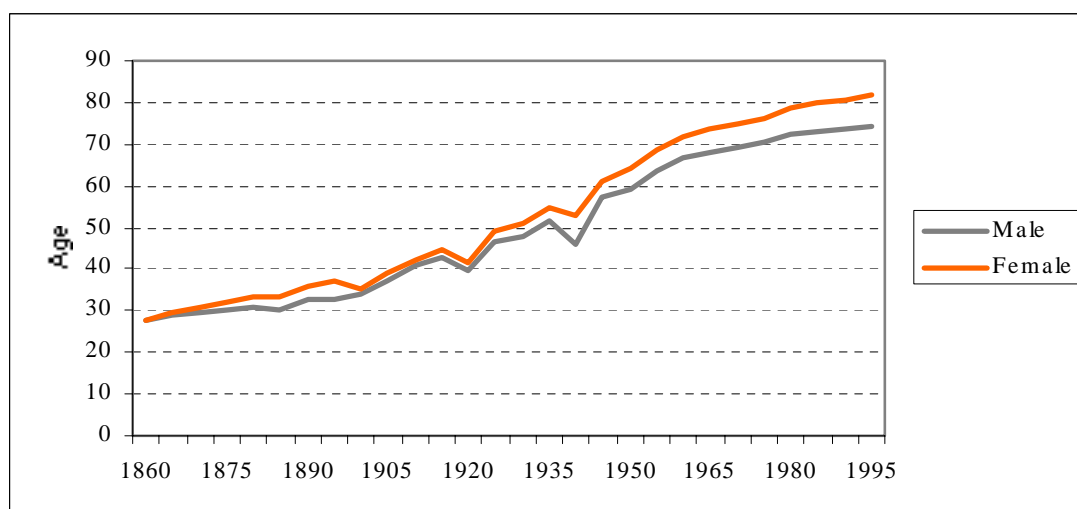


Source: Council of Europe (2001), *Recent Demographic Developments in Europe 2001*

### **1. The case of Spain: the facts**

Circa 1900, life expectancy in Spain was less than 35 years (33,7 for males, 35,1 for females) which meant a negative difference of around 15 years with respect to Western European average. In contrast, in 1999, Spanish women had a life span of 82.1 years and Spanish men of 75.1; only Japan (84.0 and 77.1) and Switzerland (82.5 and 76.8) showed better figures for both sexes at the same time. (See Figure 2)

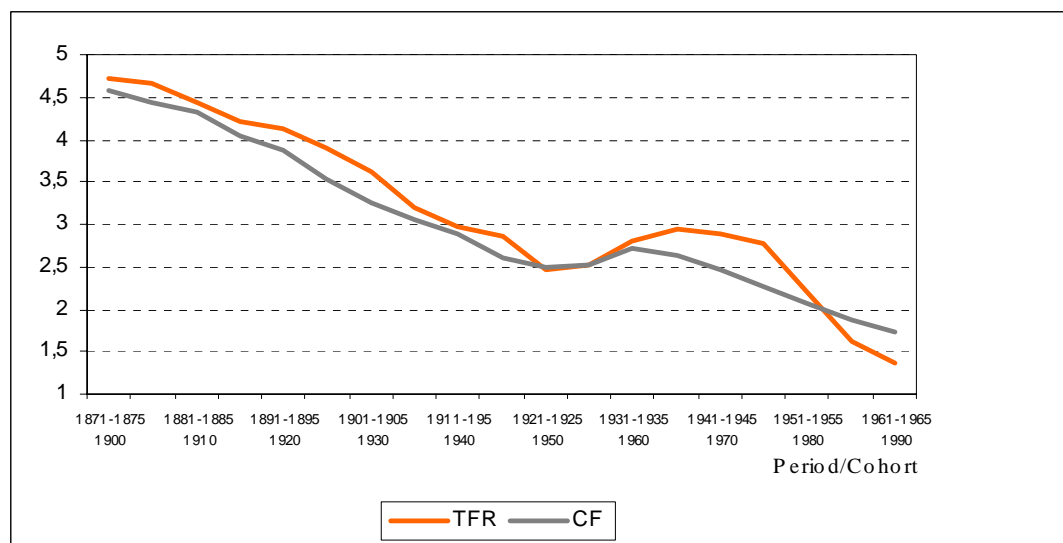
Figure 2. Life Expectancy in Spain. 1860-1995



Source: Cabré, A. (1999), INE.

In the same year 1999, the TFR in Spain was 1.20. Only Latvia (1.18), Russia (1.17), the Czech Republic (1.13) and Ukraine (1.10) had lower levels. By contrast, in 1975 the Spanish TFR (2.9) had been one of the highest in Europe. The variations on the completed fertility of cohorts is somewhat smaller but still very considerable (See Figure 3)

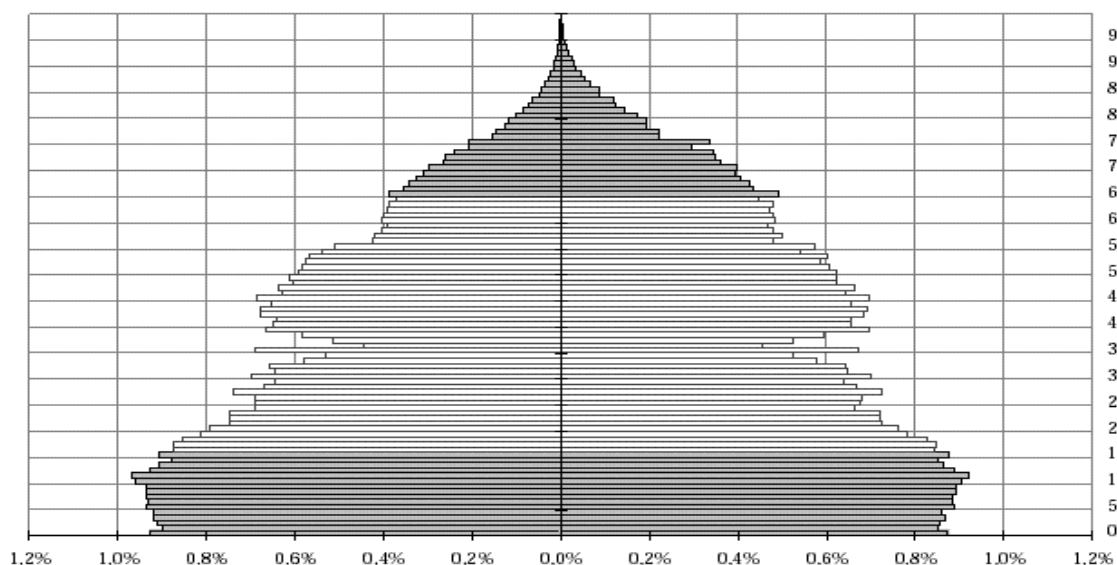
Figure 3. Cohort Completed Fertility and  
Period Fertility Rate



Source: Cabré, A., Domingo, A., and Menacho, T. (2002), INE.

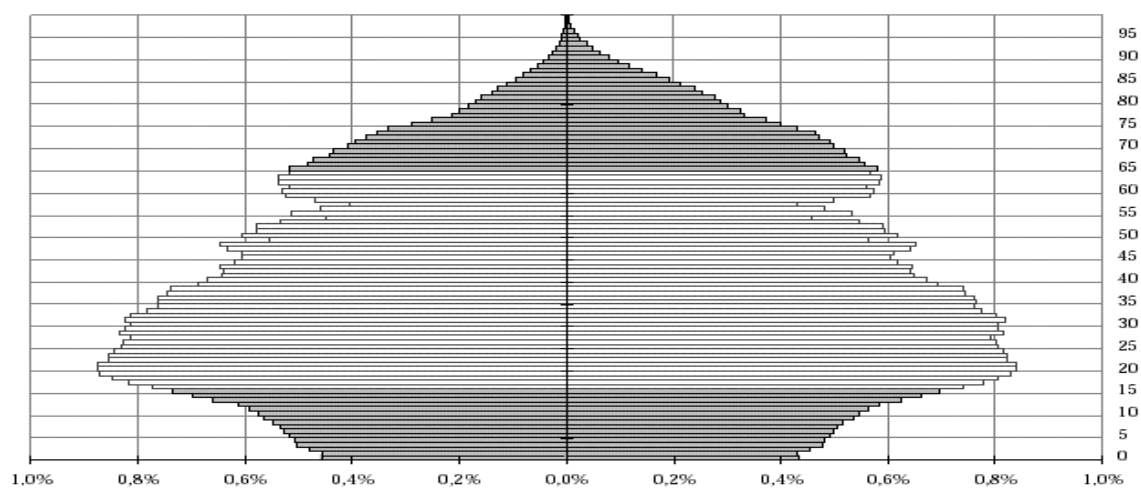
The coincidence of both these processes, large gains in life expectancy and a sharp decrease in fertility, caused a dramatic change in the age-structure of the population, as appears in the comparisons between the Spanish age-pyramids for 1975 and 1996 (Figures 4 and 5). The most interesting aspects of the transformation in the age structure are those concerning the aged population and those concerning children and young adults. The first aspect is common to many countries, but the second is hard to find outside Southern Europe and reflects the depth and speed of fertility decline, since the 1996 cohort is roughly half the size of the 1975 cohort. In summary, during the last twenty years, the Spanish age structure has been characterised by an ever-decreasing proportion of children under 15 and an ever-increasing proportion of youths and young adults, since one fourth of the present population was born between 1962 and 1977. This fact is probably one of the main factors to be taken into account when searching for explanations of low fertility.

Figure 4. Age Pyramid Spain 1975



Source: Spanish Census

Figure 5. Age Pyramid Spain 1996

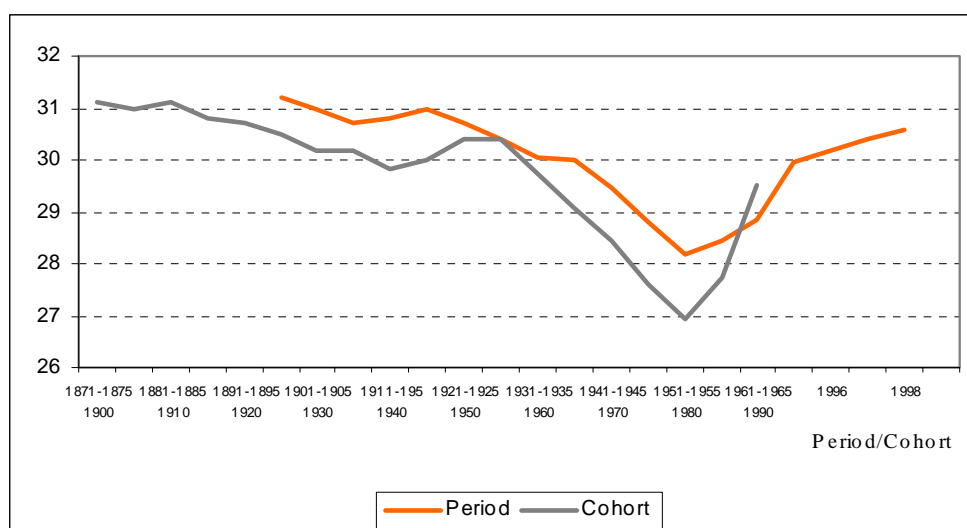


Source: Spanish Census

The sharp contrast between larger cohorts, born in the sixties and seventies, and smaller cohorts, born in the eighties and nineties, can be considered as the translation, in human figures, of the sharp contrast in behaviour related to family formation in the two periods, both being equally exceptional but in opposite senses. They are exceptional in two contrasting, and probably related, ways: the level of nuptiality and the timing of all the steps in family formation.

Differences in timing appear technically obvious when observing Figure 3, which shows how along the 20th century period fertility rates and completed fertility of cohorts followed coincident trends only until 1950 and cohorts 1921-1925. As was pointed out above, after 1950 fluctuations in period indicators seem to have been significantly larger than those in the completed fertility of cohorts. In figures, TFR ranges from 2.93 in 1965 to 1.16 in 1996, while completed fertility ranges only from 2.71 children in cohorts 1931-1935 to an estimated 1.5-1.6 children in cohorts born after 1961. The larger fluctuations of the period indicators is consistent with the fact that mean age at motherhood went down from 30.7 years in 1950 to 28.2 in 1980 and up to 30.7 years again in 1999. In the cohorts, mean age at motherhood went from 30.4 years for women born in 1926-1930 to 26.95 years for those born in 1951-1955. It is expected to exceed 30 years again for cohorts born after 1961 (See Figure 6).

Figure 6. Mean Age at Childbirth by Period and Cohort

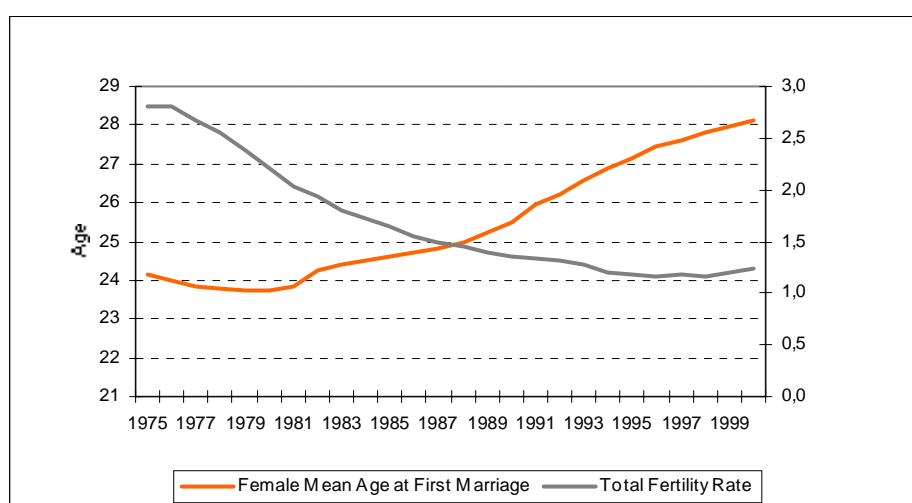


Source: Cabré, A., Domingo, A., and Menacho, T. (2002), INE.

It is interesting to observe that fluctuations in timing are shorter and deeper than those in periods, which is the opposite of what was observed in fertility levels. So, it could be concluded that a non negligible part of the fertility decline registered through the years is the result of changes in biographic time, which in itself should have, in a low fertility regime, only a small effect on the final number of children being born to a woman. The effects on the births occurring in a specific year or period may however be very important when the fluctuations in timing are as deep as they have been in Spain. In summary: many births which would normally have occurred in the eighties and nineties, had there been no changes in timing after 1950, in fact took place in the sixties and seventies or presumably were delayed until the present 21st century, causing a disproportionate period fertility decline, as there had been a disproportioned fertility increase during the sixties and seventies for opposite reasons.

Besides timing, or perhaps it should be said *associated with timing*, there is nuptiality, measured in both age at marriage and frequency of first marriage. In the first place, there is an obvious association between age at marriage and age at motherhood, and since delay in motherhood depresses period fertility, there should be a negative association between increasing age at marriage and period fertility levels.

Figure 7. Female Mean Age at First Marriage and Total Fertility Rate. Spain 1975-2000

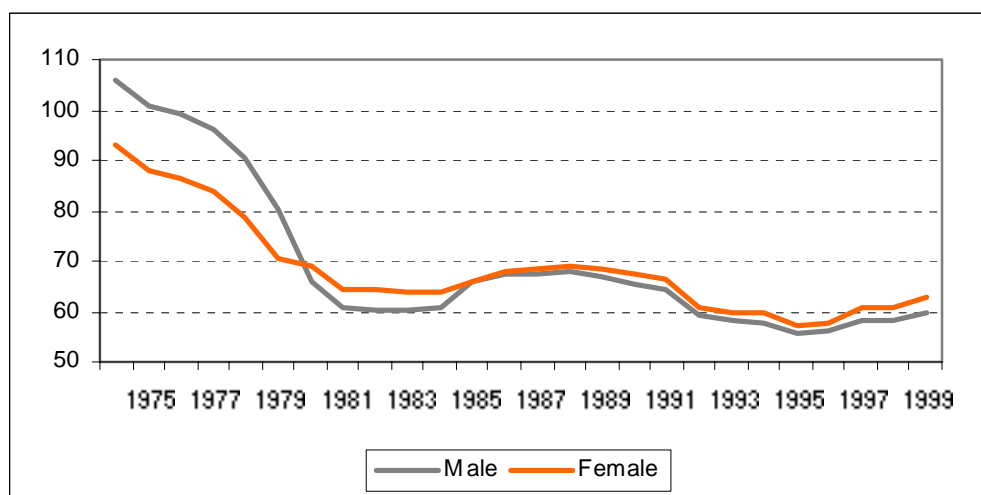


Source: processed by the author from INE (2001).

As to the effects of the level of nuptiality, Spanish data for the 20th Century show a very strong positive relationship between frequency of first marriage and completed fertility of cohorts: women born from 1931 to 1940, who had a fertility appreciably higher than those preceding them, remained unmarried at 50 in less than 6.5% of cases, while more than 14% of those born before 1920 never married. Calculations made by the author for the region of Catalonia, which experienced an early fertility transition in the 19th century, showed that for the 60 cohorts born before 1960 differences in fertility were explained mainly the proportion of ever-married women and their age at marriage, leaving little room for marital fertility differences. With reference to Spain, the data presented here has concerned only general fertility. There is no doubt that the fluctuations would be much smaller if we had been dealing with completed fertility for marriage cohorts.

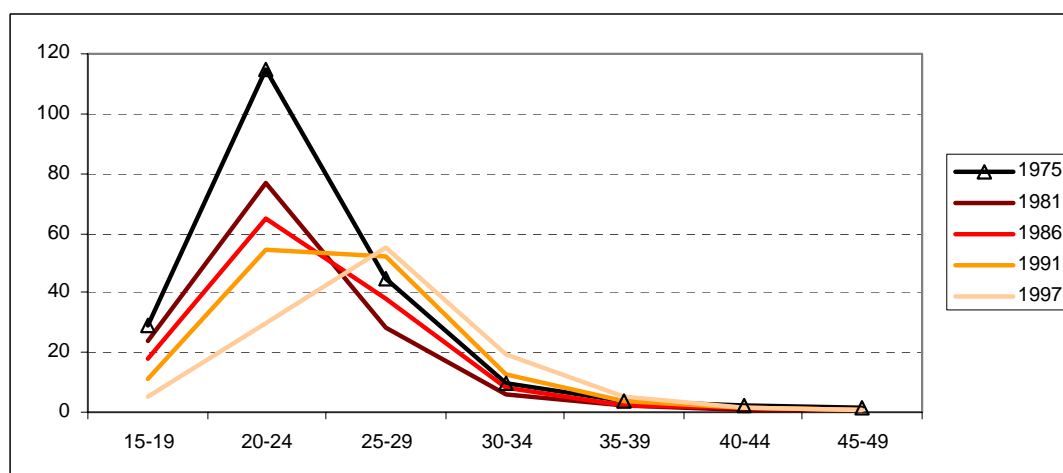
As for the more recent generations, it is difficult to predict now what proportion of women born after 1960 are going to remain permanently single, especially if we take into account consensual unions, less extensive in Spain than in other European countries but still increasingly common. In any case, given the data we already have (see Figures 8 and 9), we can state that their nuptiality is either going to be lower or occur at a much older age. The negative effect on fertility would be higher in the first case but might be non-negligible in the second, depending on the proportion of those marrying in their middle or late thirties.

Figure 8. Total Marriage Rate. Spain 1975-2000



Source: Processed by Miret, P. from INE.

Figure 9. Age-specific Female First Marriage Rates. Spain 1975-1997



Source: Processed by Miret, P. from INE.

According to the present analysis, marital fertility would come only third in order of factors, after timing and nuptiality, and not first as it is often conceptualised by those stating that "couples do not have as many children as they used to". Nevertheless, the factor is obviously relevant. Raw data show that first births have only experienced a maximum reduction of 31% (from 260.300 in 1976 to 180.369 in 1996), while fourth births have decreased constantly and quite regularly, experiencing a reduction of 87% in only twenty five years between 1975 (51908) and 2000 (6557).

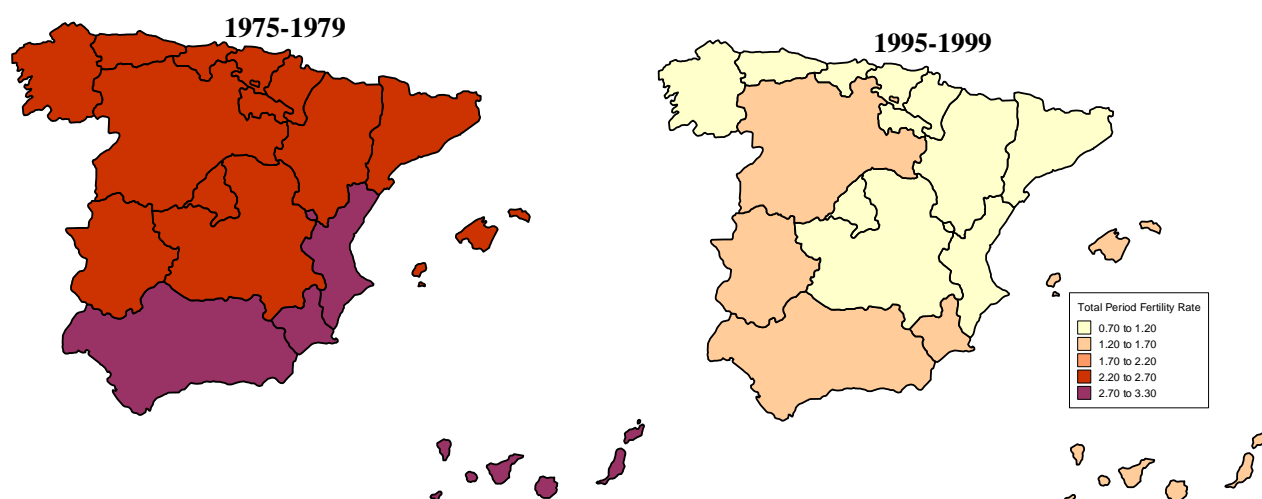
As has been pointed out by authors of theories on Second Demographic Transition, one of the characteristics of the new situation in low fertility countries is the absence of significant differences between regions or social classes. This is also true in Spain. The trends in fertility and its components that have been discussed here are common to most regions: all of them have experienced dramatic declines and delaying. As it appears in Figure 10, showing TFR values for the Spanish Regions (Comunidades Autónomas) in 1975-1999 and 1995-1999, all regions in the first period had a TFR ranging between 2.20 and 3.30 children, while in the more recent period all regions had a TFR ranging from 0.7 to 1.7 children. Southern regions have higher levels in both periods, but regional differences appear as much smaller than temporal ones. It is, by the way, amazing to realise that no region, in any period, is located in the interval of values including the mythical 2.1 children per women. They move either above or below, and quite far away from it in most cases.

With respect to age at motherhood, the findings are quite similar (see Figure 11). While in 1975-1979 all regions had a mean age at motherhood ranging from 27.5 to 30 years, in 1995-1999 all of them ranged from 29 to 31.7 years. In this case, there is not a clear pattern in regional differences holding through time. The Eastern region of Valencia, the only one staying within the same range at both points in time, figures among those with a younger age, the opposite of what happened twenty years before.

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Figure 10. Total Fertility Rates by Regions. Spain (Equal Intervals)

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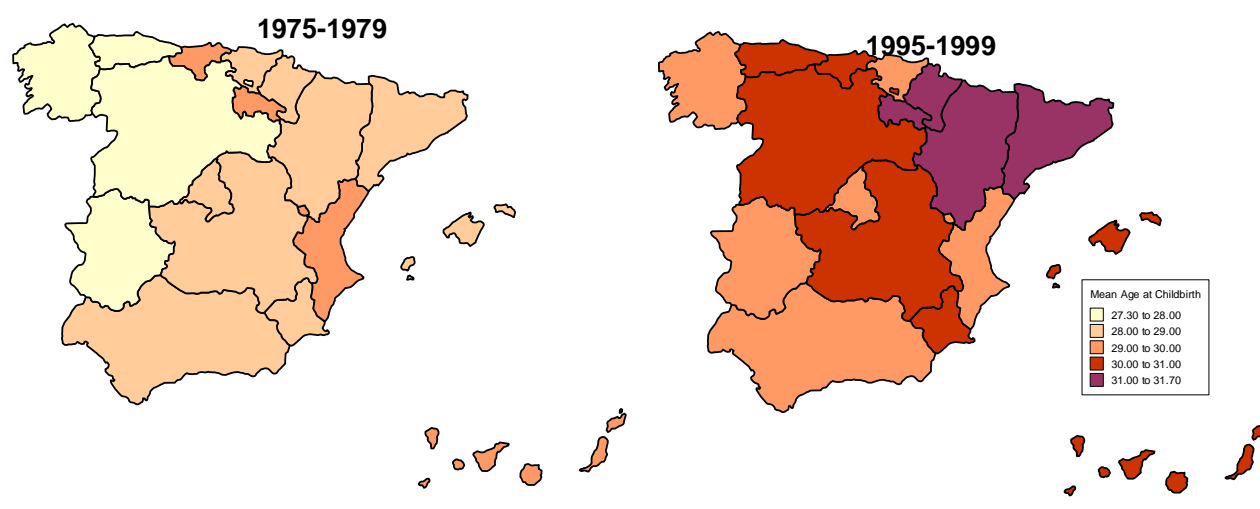


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Source: processed by the author from INE



Figure 11. Mean Age at Childbirth by Regions. Spain (Equal Intervals)



Source: processed by the author from INE

In conclusion, the analysis of data suggests that the decline of fertility in Spain during recent decades is certainly linked to the delaying of all the events relative to family formation and very probably generated, as well, by a lower propensity to marry and by a smaller final size of the family. The last two will have to be verified whenever the cohorts born after 1960 reach the end of their reproductive lives, which has yet to occur. Data show, also, that practically all regions have undergone similar declines and delays, even if substantial differences remain, mainly between South and North.

## **2. The case of Spain: the factors**

There is a large amount of theoretical work already done and now in progress aiming to establish the causes of the changes in timing and propensities which underlie the fertility decline experienced by all developed countries in the last three decades. Therefore, if some of the short considerations which follow are original, many are not. They have in common, nevertheless, an original purpose: to have been thought specifically for the case of Spain with a predictive orientation in mind.

I owe this summary of possible explanations to one of my students, who once told me: "you always have convincing explanations about low fertility, but they are never the same". He was right and his useful remark lead me to an exercise of listing all the explanations of low fertility and predictions on its future that I had proposed on different occasions and in different circumstances, and grouping and ordering them by families of thought, by their approaches, by their *logics*. This finally produced four types of approach centered on cycles, gender role transitions, growing life expectancy and geopolitics.

**The cyclical approach:** fertility is low because of the low phase of a cycle. Still,

there are several different kinds of *cyclical logics*. The economic logics: demographic behavior can be related to the economic situation, it depends, then on economic cycles, usually positively. The demographic logic: demographic behavior depends on age structure, on the relative weight of cohorts, population acting in a cyclical way on itself through the mediation of the labor market (classical Economy, Easterlin) or through the imbalances in marriage markets, the *marriage squeeze* (Cabré, 1993, 1994). In the first case, smaller cohorts have easier professional lives, marry more and earlier and have more children and earlier than larger cohorts. In the second case, and because of universal younger age of brides, in decreasing cohorts women are scarce and have more opportunities to get well married and at younger ages. Their nuptiality and fertility are higher in relative terms. That explanation could be tested, for instance, against the historical experience of the long-lasting *baby boom* after World War II. The three kinds of cyclical explanation do not exclude each other, rather they are complementary.

**The gender transition approach:** the passage from a model of *male breadwinner/female housemaker* (T.Parsons, P. McDonald) to an ideal model of equal spouses creates a transition period, shorter or longer, which is not propitious for family and fertility. On one side, the household is deserted by women but societies are not yet willing to provide the caring services necessary for children and dependents or to compensate the families for the income lost if one of its active members has to stay home. The cost of children increases greatly when the opportunity cost of the mother's labor is added to the direct cost of the child. On the other hand, during the transition period, women's entry into the labor market compensates for the low fertility and no scarcity of labor is experienced until the majority of women are in the labor force. Then, the need for workers is perceived again and society is ready to help families and invest resources in raising children. Fertility can go up again. That would explain why nowadays, contrary to what used to happen in previous periods, fertility keeps a direct relationship with female labor participation in developed countries.

**The growing life expectancy approach:** longer life spans produce mainly old persons only in the short term and because of rigidities in age definitions. In the middle and long term, longer life spans produce as well an increasing number of socially young persons, since the biographical adjustment to the new expectancies delays all the entries into (and also the exits from) the different aspects of adult life and creates a new extended period in the life-cycle, young adulthood, which is mainly devoted to education and experimentation in professional opportunities. This period of life, scarcely autonomous from an economic point of view, is not usually covered by any generalized public system of income comparable to old-age pensions, and its costs are usually assumed by families of origin. Therefore, cost of (adult) children rises again and entry into a socially reproductive age is further delayed, for men and for women.

Also, longer life spans increase the probability of families having four generations alive at once. In Spain, a half of those aged thirty have children, but

almost two thirds have at least one living grandparent. Therefore, wealth accumulated by the different generations of the same family generally increases but its generational transmission is delayed until older ages. This is another factor reducing the families' pressure on young persons to start new households.

**The geopolitical approach:** Spain, like Italy, Portugal and Greece, was a less developed country in Europe which had the historical opportunity to become a member of the European Union and strive to move towards average Western and Northern European social and economic levels. For this purpose, labor had to be upgraded and the means to attain this goal were early retirement for the older cohorts, whose abilities were too obsolete, and some kind of over-education for the young. Public and private investment in human resources went towards educating the very large cohorts of young men and women born during the sixties and the seventies rather than helping and pushing these same men and women to give birth to new individuals.

Finally, investment in education of the young gives the new generations professional abilities and expectations which keep them away from less qualified and badly paid jobs, leaving the space in the labor market for less exigent foreign migrants. Immigration then becomes a permanent structural feature of the sociodemographic system, adding to entries by birth and reducing the need for replacement fertility.

### **In conclusion**

From the point of view of these different approaches, what is the situation of Spain at the end of 2002 and what can we expect with respect to future fertility trends?

The cyclical approach suggests that small cohorts have already been entering the labor market for several years and that decreasing cohorts are approaching the age of full nuptiality. Both factors should have positive effects on fertility. It is more difficult to predict the economic cycle and its effects on demographic behavior. In any case, the increase of demand generated by the creation of new households has to act positively on economic activity.

The gender approach suggests that gender equality of opportunities in Spain has progressed considerably over the recent years, particularly for new cohorts of adults, and reminds us that the labor participation of women aged 25-34 now exceeds the average European level. In recent years, the increase in fertility levels has been much higher in places where female labor participation rates are higher, such as the region of Madrid which had a TFR of 1,41 in 2001. Therefore, the gender role transition is quite well advanced and its effects on fertility should now be positive.

From the point of view of life expectancy, no reversal of the process of adaptation to longer live spans is in sight. So, this factor is going to restrain in some way the trends towards younger transition to adulthood caused by the above mentioned factors.

Finally, from the geopolitical point of view, the aim of convergence with

European levels of affluence which lead to the relative over-education of the young has been practically attained. The number of young persons is decreasing and their employment is now higher. More resources can now be devoted to helping families with children and policies in this direction are being promoted. So, fertility should expand because of this reason.

On the other side, considering the increasing participation of migrants in the labor force, we could expect a lower demand for the reproduction of the native population, which would act to keep fertility low. But at the same time, migrants are usually young persons of full reproductive age and their fertility is higher on average, so that this factor tends to over-compensate for the former one.

Using the light shed by each of the four angles of our perspective, during the first decade of the 21st century the Spanish population should regain progressively but consistently higher fertility levels, converging also in the demographic field with average European standards and leaving behind the times of *lowest low* fertility.

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