

## MICRO-MODELLING OF RETIREMENT BEHAVIOR IN SPAIN\*

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For the average Spaniard “receiving a pension” still means “receiving a public pension.” Among retired individuals, those drawing more than 10 percent of their annual income from a private pension plan are a negligible fraction, less than one percent. The situation, while slowly evolving, will not be very different for another two decades or more. In 1990, the total number of participants in all kinds of private pension plans was at 600,000, less than 5 percent of total employment at the time. Since then, participation in pension funds has increased rapidly but not exceptionally, reaching a total of 4 million at the end of 1999. This is slightly less than 30 percent of current total employment and it is mostly composed of individuals that are at relatively early stages of their working life. It is therefore reasonable to expect that, at least for the next two to three decades, the public pension system will remain the fundamental provider of old age income for Spanish citizens.

In this work we aim in quantifying the impact of retirement financial incentives on retirement behavior in a reduced form context. In particular we examine the ability of a variety of parametric reforms in reducing retirement incentives and, hence, reducing the propensity to retire at early ages.

Summing up, the first important result is that, while economic and financial measures of retirement incentives can go a long way to explain and quantify retirement behavior, a substantial portion of the latter still remains unexplained. Various specifications of the basic model do decently well for workers enrolled in the general regime (RGSS) but do rather poorly for the self-employed regime (RETA). This may be attributed on one hand to the poor quality of the socioeconomic information available and, on the other, to the amply discussed unreliability of the earnings reported by self-employed Spanish workers. This makes the evaluation of true expected earnings and opportunity costs of retiring most difficult, not to say impossible.

Of the three quantitative indicators tested, Social Security wealth (SSW) seems to perform uniformly better. This is somewhat comforting, as

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it is the simplest measure of forward looking behavior, the one easier to compute and, quite likely, also the most reliable given the available data. The great relevance of age dummies suggests that institutional factors and coordination incentives play a major role in determining workers retirement decisions. This lends credibility to the view that a proper mix of economic incentives and institutionally mandated constraints may provide the most effective way to modify, and in the light of the increasing life expectancy push forward in time, retirement decisions.

Nevertheless, further and more detailed analysis appears to be necessary in order to properly and safely design much needed reforms. Because all financial incentives explain only a small portion of the variation in retirement ages across individuals, it is hard to detect the impact of changes in the incentive measures on individual retirement behavior.

This view, calling for additional investigation, is confirmed by the results of our policy simulations. None of the three reforms considered predicts a major shift of the distribution of retirement ages in the desired forward direction. In particular, and in our view most importantly given that this reform has recently been implemented in Spain, we confirm that the R97 reform has very little impact on retirement incentives and, consequently, on the average retirement age. In fact, as predicted by earlier and much simpler studies, it may even shift the distribution of retirement ages in the wrong direction, especially for low earners.

It seems hard to rank the other two stylized reforms, at least in the light of our findings. Both of them seem to move the average retirement age in the right direction, but only by fairly small amounts (less than two full years). The R1 reform, definitely the simplest, tend to perform better than the R2 reform, but this result is not uniform across regimes and sexes. On the other hand, the R2 reform (which is designed to be common to all countries considered in this volume) modifies current Spanish legislation only slightly. As pointed out above, the early and normal retirement ages selected by R2 coincide with those already in place in Spain. The only difference is the actuarial adjustment for retirement before age 70, which is quite less favorable than the one currently used in Spain. Our finding that even a relatively sizeable reduction in SSW would increase the average retirement age by only about one and a half year is a direct consequence of the fact that SSW explains much less than half of the total variability in Spanish retirement age. Uncovering the socioeconomic factors explaining the residual half of such variability is therefore crucial for designing an effective reform.



