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Social security incentives and retirement decisions in Italy: An empirical insight

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Abstract

In the present paper I focus on the measurement of Social Security incentives to early retirement enjoyed by Italian male employees during the late 1980s up to year 2000 and investigate the role played by such incentives and by other socio-economic variables in determining the shape of retirement hazards. Computations, carried out on a panel sample drawn from the SHIW dataset, demonstrate that continuing to work beyond age 60 was strongly discouraged prior to 1990s reforms. Such reforms appear to have especially affected Public Sector workers and younger cohorts. The econometric estimations bring evidence of forward-looking behavior, since individuals do appear to take into account the lifetime path of Social Security incentive changes. Finally, the analysis suggests that such characteristics should be carefully accounted for by any reform aiming at improving the activity rates.

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1. Introduction

Understanding how individuals decide the timing of retirement is a critical question for Italy, where tightening reforms of the National Social Security (SS from now) system have already been introduced in early 1990s and other reforms are likely to be implemented in the near future. Yet, studies assessing the determinants of retirement are very few and their results are somehow ambiguous, so that little can be said about the effectiveness of any reforms in improving activity rates. In fact, while there appears a general consensus on the generosity of the SS system being the leading explanation of the sizeable exit rates from the labor force at early ages occurred in Italy so far, there is still little evidence on the degree of sensitivity of workers to such incentives.

The aim of the present work is twofold: on the one hand, to analyze and quantify the magnitude of SS provided incentives to early retirement for Italian male employees during the late 1980's through year 2000; the second aim is to carry out an empirical analysis in order to investigate the role played by such incentives and by other socio-demographic factors in explaining the shape of the retirement hazards.

From a methodological standpoint, this work relies on two important lessons provided by the recent literature on retirement. First, as several authors have pointed out, retirement is likely to be a decision undertaken by rational, forward looking individuals who, in order to maximize their lifetime utility, typically contrast present SS wealth accumulation opportunities with those at some time in the future. Starting from the work by Stock and Wise (1990) on the Option Value of retirement, many works have shared this assumption and assessed its relevance by both estimating structural forms (like Gustman and Steinmeier (1986) and Rust and Phelan (1997)) and reduced forms of retirement decisions (Lumsdaine et al. (1992) and, for Italy, Brugiavini and Peracchi (2004)). Second, some recent studies (Krueger and Pischke (1992), Coile and Gruber (2000a,b) and Chan and Stevens (2001)), have highlighted the importance of the identification problem of the retirement incentive effects estimated by reduced forms. In other words, these authors stress the difficulty in disentangling the role of earnings from the 'pure' SS incentives, since the latter are a (non linear) function of the former and, in turn, the former are likely to be endogenous to unobserved tastes for retirement. The solutions to this issue proposed by the cited authors are, on the one hand, a new measure of SS early retirement incentive (the so-called Peak Value build up by Coile and Gruber (2000a)), meant to properly purge out the effect of wage changes from that of SS wealth accumulation and, on the other hand, fixed effects OLS estimates (Chan and Stevens).

In the spirit of these works, in the present paper I use some of these measures of Social Security incentives for early retirement (e.g. Accruals, Option Value, Peak Value) and propose three extensions (a 'one year' measure —the Marginal Cost of Retirement, and two 'lifetime' measures —the Minimum Cost Value and the Minimum Tax Value). I compute these measures both prior to and after the 1990s reforms and both for public and private sector employees and assess their role in explaining the retirement choices of these workers. The data for the analysis is a partially rotating panel sample drawn from the Bank of Italy Survey on Households' Income and Wealth (SHIW) from 1989 through 2000.