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RETIREMENT AND HEALTH IN EUROPE

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EXTENDED ABSTRACT

Population aging is one of the greatest social and economic challenges of the 21st century. Europe is aging faster than other parts of the world: It has the highest proportion of persons aged 65 or over (about 16%) among the world's regions, with Italy having the highest proportion of persons aged 65 or over (18% in 2000). In Europe, the old-age dependency ratio is expected to increase from about 27% in 2000 to 53% in 2050. This increase of the dependency ratio in itself places a heavy financial burden on society through pay-as-you-go financed pension, health and long-term care systems. There are other pressures on the social security and welfare systems as well. Older workers are more likely to be in some kind of disability programs. Moreover, Europeans have been retiring much earlier than inhabitants of other developed countries: for instance, in Belgium only a quarter of all males are still in the labor force at age 55-64, compared to three quarters in Japan.

This typically European combination of an aging population and retirement at ever earlier ages with relatively generous benefits puts very severe strains on our capacity to care for the elderly in the future. Thus, everything else equal, aging places a much higher burden on the sustainability of income maintenance systems in Europe than elsewhere in the world, challenging European public policy – pension policy, health care policy, labor market policy.

These trends have not gone unnoticed among policymakers. At a summit meeting in Lisbon in Spring 2000 (and in follow-up meetings in Stockholm 2001, and Barcelona 2002) EU leaders committed themselves to promote "active aging", and in particular to significantly increase the employment rate for workers over 55 to 50% and to progressively increase by about five years the effective average retirement age in the EU by 2010. [1]

In this paper, we exploit the richness of a newly available pan-European dataset, the Survey of Health, Ageing and Retirement in Europe (SHARE) to investigate the retirement and labor force participation decisions of older Europeans. In particular, we analyze the role played by health factors and by social security and pension rules in shaping labor supply and retirement decisions.

SHARE is ideally suited for this task because it is an interdisciplinary household survey collecting strictly comparable information on individuals aged 50 and over, in eleven EU countries ranging from Scandinavia, trough Western and Central Europe, to the Mediterranean.[2]

We build on the pioneering theoretical work by Grossman (1974a, 1974b, 1999) and on recent developments by Currie and Madrian (1999) and derive an empirical specification of the "demand for health" and its relationship with labor supply, and proceed to estimate the derived equation for the probability of being retired using a sample of 13,000 SHARE respondents aged between 50 and 70 who are working or inactive.[3]

In line with the theoretical framework, in the multivariate analysis, we model the probability of being retired as a function of age, marital status, education and gender, and two indicators which will be the focus of the analysis: a measure of the generosity of the social security system, the social security wealth, and a measure of "health status". The measure of

[1] At the summit meeting in Lisbon in Spring 2000, EU leaders set the ambitious goal for the EU to become the "most dynamic and competitive knowledge-based economy in the world" by 2010. To achieve this goal, they set a series of wide-ranging and ambitious targets that should be reached by 2010. For 2010, in addition to these targets regarding the employment of older workers, the Lisbon 2000 Council (together with Stockholm 2001 and Barcelona 2002) set targets of 70% fir the overall employment rate, and of 60% for the female employment rate.

[2] SHARE has become a longitudinal survey. This paper uses only the first wave because at the time of the writing the second wave has not been released yet. Eleven countries have contributed data to the 2004 SHARE baseline study. They are a balanced representation of the various regions in Europe, ranging from Scandinavia (Denmark and Sweden) through Central Europe (Austria, France, Germany, Switzerland, Belgium, and the Netherlands) to the Mediterranean (Spain, Italy and Greece). Further data have been collected in 2005-06 in Israel. Two 'new' EU member states - the Czech Republic and Poland - as well as Ireland have joined SHARE in 2006 and participate in the second wave of data collection.

[3] We focus on this age range because for older ages there is basically no variability of the indicator worker/retired.

"health status" is obtained constructing a cumulative index of the presence of limitations with activities of daily living. The social security wealth measure is constructed as the present discounted value of expected future benefits from social security and pensions, discounted at current age by both a given interest rate and the conditional survival probability. In this definition we include both public social security benefits for old age and/or early retirement and private pensions. This variable captures the differential generosity of the system in the different countries and for the different individuals. The effect of institutions and labor market configuration is captured in two ways: through this variable measuring the generosity of the social security system, and through country-dummies, which pick up several additional dimensions of country specific effects.

To overcome endogeneity and measurement errors problems in the construction of the social security wealth and of the health status variable, we rely on instrumental variables techniques. The social security wealth is instrumented by the type of employment, and the health status index is instrumented by retrospective information on investment in one's health, and by respondents' subjective survival probabilities.

The preliminary results indicate that institutional differences in welfare systems clearly affect the distribution and the age pattern of participation to the labor market and of retirement. Countries where early retirement is allowed and/or is generous see a prevalence of early retirees (typically Southern countries, but also Austria and France). Furthermore, in countries where other exit routes are allowed as form of early retirement (disability and unemployment) these substitute for retirement. There is potentially huge unused labor capacity in countries such as Austria, Italy and France where "healthy" individuals are not in the labor force.

KEY-WORDS
Elderly labor force participation, retirement, health, instrumental variables, international comparative analyses, Europe, SHARE