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Does Retirement Make you Happy? A Simultaneous Equations Approach

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Continued improvements in life expectancy and fiscal insolvency of public pensions have led to an increase in pension entitlement ages in several countries, but its consequences for subjective well-being are largely unknown.**

In Fonseca et al. (2014) we examined the effect of retirement on subjective well-being within 12 countries, using panel data from the U.S. Health and Retirement Study (HRS) and the Survey of Health, Aging, and Retirement in Europe (SHARE). In estimating retirement effects, we account for potential reverse causation of subjective well-being on retirement, exploiting variations in public pension eligibility due to country and cohort specific retirement ages (early and full entitlement ages). In the current paper we, further analyze the interplay of work/retirement, financial well-being, and subjective well-being.

Financial consequences of retirement complicate the estimation of effects of retirement on subjective well-being as financial circumstances, both in absolute and relative terms (i.e. one's financial means in comparison with others), may influence subjective well-being, and therefore, the effects of retirement are likely to be confounded by the change in income. At the same time, unobservable determinants of income are probably related with unobservable determinants of subjective well-being, making income possibly endogenous if used as control in subjective well-being regressions. To address these issues, we estimate a simultaneous model of retirement, income, and subjective well-being while accounting for time effects and unobserved individual effects. Public pension arrangements (replacement rates, eligibility rules for early and full retirement) serve as instrumental variables. We use the estimated simultaneous model to perform a number of policy simulations.

***An exception is Grip et al. (2012) who found a strong and persistent negative effect on psychological well-being from a change in the Dutch civil servants' pension system that affected the pension age eligibility of some cohorts but not of others.*

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Data

We use data from HRS and SHARE for the period 2004-2010. The HRS was designed to cover a wide range of demographics, health, work and retirement, income and assets, as well as family and social networks. SHARE was developed using the HRS model to collect conceptually comparable data across different countries in these key domains. Lee (2007) provides a detailed discussion of the comparability of the surveys. Currently, three waves of SHARE (2004, 2006, and 2010) are available. The first wave of SHARE was collected in 2004 in 11 European countries (Austria, Denmark, Belgium, France, Germany, Greece, Italy, the Netherlands, Spain, Switzerland, and Sweden). The 2008 SHARE wave was devoted to life-history interviews and did not include subjective well-being measures.

All surveys contain several questions that can be used as indicators of subjective and financial well-being. Although not all surveys include exactly identical questions on subjective well-being, they all include questions that cover comparable domains and harmonized versions of variables can be constructed for cross-country comparison.

Main findings

- Depressive symptoms are negatively related to retirement. In other words retirement reduces the probability of depression
- Life satisfaction is positively related to retirement.
- Household wealth, being married, educational attainment, are all positively related to life satisfaction and reduce the probability of depression.
- Major health conditions increase the probability of depression and reduce life satisfaction.
- Remarkably, income does not seem to have a significant effect on depression or life satisfaction. This is in contrast with the correlations in the raw data that show significant relations between income and depression and life satisfaction. This suggests that accounting for the endogeneity of income in equations explaining depression or life satisfaction is important.

References

Fonseca, Raquel, Arie Kapteyn Arie, Jinkook Lee, Gema Zamarro. 2014. "A Longitudinal Study of Well-Being of Older Europeans: Does Retirement Matter?" *Journal of Population Aging* 7: 21-41.

Grip, A., Lindeboom, M., & Montizaan, R. 2012. "Shattered dreams: the effects of changing the pension system late in the game," *Economic Journal* 122: 1-25.

Lee Jinkook. 2007. "Harmonization of Aging Surveys and Cross-national Studies of Ageing." National Institute of Aging. Behavioral and Social Research Program. http://www.nia.nih.gov/sites/default/files/meeting-report_5.pdf

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