This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Research Findings in the Economics of Aging

Volume Author/Editor: David A. Wise, editor

Volume Publisher: The University of Chicago Press

Volume ISBN: 0-226-90306-0

Volume URL: http://www.nber.org/books/wise08-1

Conference Dates: May 10-13, 2007

Publication Date: February 2010

Chapter Title: Comment on "Work Disability: The Effects of Demography, Health, and Disability Insurance"

Chapter Author: Robert J. Willis

Chapter URL: http://www.nber.org/chapters/c8191

Chapter pages in book: (58 - 61)

- King, G., C. Murray, J. Salomon, and A. Tandon. 2004. Enhancing the validity and cross-cultural comparability of measurement in survey research. *American Political Science Review* 98 (1): 567–83.
- Klevmarken, N. A., B. Swensson, and P. Hesselius. 2006. The SHARE sampling procedures and calibrated design weights. In *Health, aging, and retirement in Europe: Methodology*, ed. A. Börsch-Supan, and H. Jürges. Mannheim: MEA.
- Kohli, M., M. Rein, A.-M. Guillemard, and H. van Gunsteren, eds. 1991. *Time for retirement: Comparative studies of early exit from the labor force.* Cambridge: Cambridge University Press.
- Lan, T. Y., D. J. H. Deeg, J. M. Guralnik, and D. Melzer. 2003. Responsiveness of the index of mobility limitation: Comparison with gait speed alone in the longitudinal aging study Amsterdam. *Journal of Gerontology: Medical Science* 58A:721–28.
- Mackenbach, J., M. Avendano, K. Andersen-Ranberg, and A. R. Aro. 2005. Physical health. In *Health, Aging, and Retirement in Europe: First results from SHARE*, ed. A. Börsch-Supan, A. Brugiavani, H. Jurges, J. Mackenbach, J. Siegrist, and G. Weber. Mannheim: MEA.
- Marmot, M., J. Banks, R. Blundell, C. Lessof, and J. Nazroo. 2003. *Health, wealth, and lifestyles of the older population in England: The 2002 English longitudinal study of aging.* London: The Institute for Fiscal Studies.
- National Research Council. 2001. Preparing for an aging world: The case for crossnational research, Panel on a Research Agenda and New Data for an Aging World, Committee on Population and Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academies Press.
- Organization for Economic Cooperation and Development. 2003. *Transforming disability into ability*. Paris: OECD.
- ——. 2005. OECD health data. Paris: OECD.
- Sen, A. 2002. Health: Perception versus observation. British Medical Journal 324 (April): 860–61.
- World Health Organization. 2002. Active aging: A policy framework. Geneva: WHO.

## **Comment** Robert J. Willis

The tension between a political desire to maintain welfare state benefits and the fact of rapid population aging generates many of the key problems facing European policymakers. Not only does population aging directly increase the costs of pension, health, and disability programs that benefit the elderly, but economic theory and analysis has shown that these costs may be exacerbated by unintended incentive effects. This point was made dramatically in the cross-national project of Gruber and Wise (1999, 2004, 2005) which showed powerful effects of pension and disability plans on retirement behavior. Their initial analysis, based on country-level administrative and

Robert J. Willis is a professor of economics at the University of Michigan, where he is also a research professor in the Survey Research Center and the Population Studies Center of the Institute for Social Research.

aggregate data, provided important motivation for the development of comparable cross-national microlevel survey data in Europe in order to advance understanding of the effects of social and economic policies in the countries of the European Union.

Under the leadership of Axel Börsch-Supan, a remarkable group of researchers from across Europe and across disciplines have come together to design and carry out the SHARE project (Survey of Health, Aging, and Retirement in Europe). The SHARE collects longitudinal data on persons age fifty and over using a design that attempts to maximize comparability both across countries within SHARE and with its sister studies, the Health and Retirement Study (HRS) in the United States and the English Longitudinal Study of Aging (ELSA) in the United Kingdom. While the current chapter by Börsch-Supan uses cross-section data from SHARE's first survey wave of eleven countries in 2004 (together with 2004 cross-sections from HRS and ELSA), researchers can look forward to longitudinal data beginning with the 2006 wave and to the expansion of SHARE to include fourteen countries in 2008 and, ultimately, all EU countries by 2010. In addition, researchers from HRS, ELSA, and SHARE have been active collaborators in supporting the creation of similar surveys in Latin America (Mexico, Costa Rica, Chile) and Asia (Korea, Japan, China). These efforts are creating a truly global data system that will allow researchers to study behavior of individuals and families in their own country's policy environment, in contrast to the behavior of comparable people in the policy environments of other countries.

This chapter provides a first hint of the potential of the SHARE data to produce useful insights into important policy questions. Disability rates vary substantially across countries within the EU. Popular explanations for these variations include cross-country differences in demographic composition, in the health status of their populations, and in institutions that provide disability benefits for those who apply and are deemed eligible. In this chapter, SHARE, HRS, and ELSA data are pooled in order to examine the importance of demographic, health, and institutional variables in microlevel regressions on individual disability status. Not surprisingly, many variables in each of these categories are statistically significant predictors of disability status in the expected direction.

To me, two results from the micro regressions are of most interest. One is the strong interaction between gender and generosity of disability program, which the author explains plausibly as a consequence of the relative attractiveness of disability programs to older women whose pension options are poor because of short work histories. The second result is the finding that the impact of poor health on disability enrollment can be demonstrated using an objective measure—grip strength—in addition to its relationship to subjective self-reported health measures, which may suffer from justification and cultural biases. The fact that this pooled regression can be

estimated is testimony to the remarkable scientific collaboration among the designers of these surveys to ensure harmonization of questionnaires and survey methods in order to maximize the comparability of economic and health measures across countries.

Next, Börsch-Supan uses these regression estimates to answer a set of "counterfactual" questions about which cross-country variations in disability rates are due to demographic, health, or institutional differences. Although demographic and health variables do affect the chances of individual disability enrollment, he finds that cross-country differences in the distribution of these variables have essentially no power to explain cross-country variation in aggregate disability rates. In contrast, he finds that most systematic cross-country variation is eliminated under the counterfactual assumption that all individuals face the same policy regime. Given the strong interaction effect between gender and policy already noted, it would be interesting to redo this analysis using sex-specific aggregate rates and regression coefficients to see if cross-country differences are eliminated for both sexes.

Clearly, the analysis of this chapter is but a first step. The chapter convincingly shows that policy matters in determining disability rates, but it leaves open critical questions about precisely what features of policy are important in determining disability status. These, of course, are the questions to which policymakers would wish to know the answers in thinking about reforms to the disability systems in their country. More generally, policymakers would want to know how to balance deadweight losses borne by society due to distortions of retirement incentives created by a disability policy against the gain in the welfare of those who become disabled. These are difficult questions. To answer some of them may require, as Börsch-Supan notes, a major project analogous to the Gruber-Wise project to infer quantitative policy parameters such as implicit tax rates on work from the disability policies in each country that could be appended to the pooled HRS/ELSA/SHARE microdata. Even without such a project, SHARE and its sister surveys provide the raw material to address disability policy issues in much more depth. For example, in a series of papers, Benitez-Silva et al. (1999, 2004) and Benitez-Silva et al. (2006) utilize HRS self-reported health conditions to examine the determinants of the decision to enroll in disability programs and the degree to which the U.S. disability system correctly enrolls the truly disabled and excludes the nondisabled. It would be both feasible and fascinating to examine these questions across different countries using SHARE data.

## References

Benitez-Silva, H., M. Buchinsky, H. Chan, and J. Rust. 2006. How large are the classification errors in the Social Security disability award process? Unpublished Manuscript.

- Benitez-Silva, H., M. Buchinsky, H. Chan, J. Rust, and S. Sheidvasser. 1999. An empirical analysis of the Social Security Disability application, appeal, and award process. *Labour Economics* 6 (2): 147–78.
- ———. 2004. How large is the bias in self-reported disability? *Journal of Applied Econometrics* 19 (6): 649–70.
- Gruber, J., and D. Wise, eds. 1999. *Social Security and retirement around the world.* Chicago: University of Chicago Press.
- 2004. Social Security and retirement around the world: Micro estimation of early retirement incentives. Chicago: University of Chicago Press.
- ———. 2005. Social Security and retirement around the world: Budget impacts of early retirement incentives. Chicago: University of Chicago Press.