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Social Security Programs and Retirement around the World: Micro-Estimation

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the University's reputation to attract high-paying students for its various programs. Having a public university spin off a private college is consistent with sustained roles for private education and could be consistent with a significant complementary public role. The problem for the loss of the public commons, however, arises as Darden's faculty undertake research and develop teaching materials that are controlled by the firm the materials describe. Thus, ideas developed for one firm do not become available for use by others. The Darden case does seem to show a loss of the public common. The author does not, however, suggest that the University of Virginia should disallow such activities by schools that bear its name. In fact, the volume lacks policy proposals and leaves the reader wondering just what problem the author has isolated and what he would recommend.

The book is a lively read, with detailed case studies, and interesting contrasts that reveal important changes in American higher education. Its shortcomings notwithstanding, I recommend it to scholars and policy-makers alike.

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Social Security Programs and Retirement around the World: Micro-Estimation. By Jonathan Gruber and David A. Wise. Chicago: University of Chicago Press and NBER, 2004. 752 pp. ISBN 0-226-31018-3, $99.50.

It is ironic that as people are living longer, they are retiring from the labor force earlier. This will have an increasingly negative impact on labor supply, GDP, and the financial solvency of social security systems as populations age, both in the United States and in other countries. During the past decade a large literature has developed to explain the falling labor force participation rate among older men. Several studies have argued that rising national income has led to a demand for greater leisure. If workers were non-myopic and took all benefits and costs into account, this choice would imply that the utility from increased leisure is greater than the potential utility from continued work and output. However, the work by Gruber and Wise, together with colleagues from many countries, in their 1999 *Social Security and Retirement around the World* (University of Chicago Press), reinforced by the present volume, provides irrefutable evidence that retirement behavior is strongly influenced by rules of the social security system, which distort these decisions by hiding some of the social costs of retirement and the social benefits of continued work.

The major contribution of the first volume was to measure, carefully and consistently in many countries, the incentive to postpone retirement, and to analyze the relationship between this incentive and the observed labor force participation rates of older men across countries and time. The incentive to work was defined as the incremental wage plus the increase in the expected present discounted value of future social security benefits (social security wealth or SSW) from working one extra year. The increment to SSW varies across individuals within a given country because of their varying work histories, but even greater variation is found across countries that have different social security systems. In most countries studied, the increment to SSW for older men from an additional year of work is actually negative—an implicit social security tax—because the increase in future annual benefits does not compensate for the lost current year of benefits when retirement is postponed.

The present volume examines the impact of work incentives at the individual level, using longitudinal micro-data within each country. Two additional measures of work incentives are defined, based on longer-term returns to work—the "option value model" and the "peak value model." The option value model evaluates the utility derived from the expected incremental income from wages and pensions for all possible future retirement ages and chooses the optimal date. The peak value model focuses on pension income only. The reward for continued work is the difference between the individual's SSW if he retires today and his SSW if he works to some future date when it is maximized. If this incremental wealth is negative, people will retire today (if allowed to do so). Regressions show that in most countries studied the work disincentives and the responses to them are large; the greater the disincentives facing an individual the less likely he is to postpone retirement; people in different cultural settings have very similar responses; and the longer-term measures of incentives are stronger than the original short-term measure. Having estimated the marginal responses to incentives, the authors then simulate the impact of

policy reforms that would alter the age at which retirement is allowed, and the rewards for continued work thereafter. The simulated effects on retirement choice and labor supply are consistently large.

These findings may at first seem surprising, in view of another strand of empirical literature showing that the labor supply of men is inelastic, hence unresponsive to taxes and other policies that alter incentives. However, this literature has focused on prime-age men, who might wish to adjust their hours or weeks of work marginally but are constrained from doing so by labor market institutions that fix these parameters and force an "all or nothing" choice. "Nothing" is too little for prime-age men, but not for older men who have access to other sources of income. Thus the earliest allowable age for retirement is very important, because it gives workers access to an alternative income source by making their SSW liquid. Beyond this age, the labor supply of older workers is apparently quite elastic and responsive to incentives. If they can get a similar-size pension whether they retire sooner or later, the evidence shows that they will retire sooner.

In fact, many countries are now adopting some of the reforms simulated by Gruber and Wise, such as raising the retirement age, removing penalties for continued work, and adding actuarial penalties for early retirement. The United States has long had a better record in this regard, and a correspondingly higher labor force participation rate for older workers, than most other countries. But several countries (not included in the Gruber and Wise study) are now jumping ahead of us by adopting, as part of their mandatory systems, defined contributions plans that require people to save for retirement, invest at market rates, and annuitize on actuarially fair terms. This eliminates most of the disincentives to continued work.

I have three caveats about the findings from this work:

(1) The authors show convincingly that raising the earliest allowable pensionable age increases the labor force participation rate and output. However, this does not necessarily mean that it increases utility for most workers. Workers lose potential leisure as well as access to their retirement savings, which they may wish to consume sooner rather than later. The removal of distorting incentives (for example, eliminating the pension reduction for people with earnings) leads to Pareto improvements if we assume that people are well informed and rational. But changing the age at which workers first become eligible for the pension involves a collective choice rather than an individual choice. A collective choice is made about how important output versus leisure is for society as a whole and what is the best way to achieve solvency in a defined benefit system, but there is no automatic mechanism assuring that the efficient age, which pushes the utility frontier outward, will be chosen. Another approach, especially promising in a DC system, would avoid specifying a minimum age but would instead specify some minimum SSW and pension size, after which workers could stop further retirement saving, begin to withdraw their existing saving, and work or not work as they desire. The social discussion would then revolve about what is the minimum acceptable retirement income—while any further decisions about life cycle savings and labor-leisure trade-offs are left to the individual. This approach is used in Chile. Preliminary investigation suggests that workers take access to their retirement savings as soon as they can, but they often continue working; the labor force participation rate of older workers has increased noticeably since the Chilean pension reform in 1981.

(2) Although multiple paths to retirement are discussed, I did not find a full discussion of the interrelationship between the normal retirement decision and the disability retirement decision. Age-specific retirement rates from each path are treated as independent and averaged to get the over-all retirement probability. In the simulation that raises the normal retirement age by three years, age-specific disability probabilities are also raised by three years, so that, for example, the disability probability of an age-57 person is now attributed to a 60-year old. This interpretation emphasizes the volitional and regulatory side of disability. However, there is also an actual physical side of disability, which is strongly age-related. Suppose that the physical rationale increases sharply just above the current normal retirement age. We do not observe this now, because people in that age range have already retired normally. So this effect would not show up in the regressions that are based on current behavior. But if the retirement age is raised by three years, many of these workers might then opt for disability benefits, rather than postpone retirement. In that case, the actual change in disability retirement will be positive rather than negative and the increase in the labor force due to the policy change will be smaller than that simulated in this study. Along similar lines, suppose that unemployment rates (and discouraged worker

rates) increase sharply after the current normal retirement age, perhaps because employer hiring practices do not change when the normal retirement age changes. This, too, would lead to a lower employment and output effect than that simulated here. The book would have benefited by calling these caveats to the attention of the reader.

(3) A third issue concerns the choice of discount rate in calculating the work incentive effects and worker responses. A 3% discount rate is uniformly used, without any discussion. But empirical evidence suggests that many people have a much higher discount rate. If a higher discount rate is used, the work disincentive measures will be greater because the loss of the present year's benefit will be weighted more heavily relative to expected future incremental benefits. But if these disincentive measures are larger, the estimated response coefficients on the incentive measures would probably be smaller, to produce the same observed work and retirement outcomes. In that case, the simulated impact of policy changes on labor supply might be smaller. It would have been useful to demonstrate the sensitivity of the analysis to alternative discount rates.

Despite these caveats, there is no doubt that the Gruber and Wise study of retirement behavior—both in the first volume and in this one—is path-breaking and must influence our thinking about when and why people retire. They combine a broad sweep—across twelve countries and long time periods—with careful methodology. They show that incentives matter, that the details hidden in policies create incentives, and that these have a strong influence on behavior.

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Job Creation, Job Destruction, and International Competition. By Michael W. Klein, Scott Schuh, and Robert K. Triest. Kalamazoo, Mich.: Upjohn Institute for Employment Research, 2003. 216 pp. ISBN 0-88099-272-7, $40.00 (cloth); 0-88099-271-9, $17.00 (paper).

> "Outsourcing is just a new way of doing international trade," Mankiw told reporters. "More things are tradable than were tradable in the past and that's a good thing."
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> ("Bush, Adviser Assailed for Stance on 'Offshoring' Jobs," by Jonathan Weisman, *Washington Post* Staff Writer, Wednesday, February 11, 2004)

Received economic wisdom and popular opinion often conflict, but nowhere more than in discussions of the effect of international trade on economic well-being. The remarks by Greg Mankiw cited above, which express a view that is taught in most basic economics classes, were excoriated by the popular press, and not supported by the White House. Whether economists like it or not, there is a clear perception that international trade leads to lost jobs for American workers, and perceptions generate political responses. The release of this book, which painstakingly investigates the effect of international trade on the reallocation of jobs in the U.S. economy, provides welcome empirical evidence to inform the political debate.

A key contribution of this research, as the title indicates, is to provide a detailed analysis of what the data tell us about the effect of international competition on the reallocation of jobs within and across detailed industries, rather than net employment change. The analysis of firm-level micro data by Steven J. Davis, John C. Haltiwanger, and Scott Schuh in *Job Creation and Destruction* (MIT Press, 1996) demonstrated very clearly that there are enormous amounts of job creation and destruction in the economy, and that this is often a productive reallocation of resources. Yet in times of economic downturn, a great deal of political attention is paid to lost jobs—particularly jobs lost to foreign competition—while job creation goes largely ignored.

What do the authors find? They find that the U.S. economy has become substantially more open to trade. Not surprisingly given their exhaustive use of micro data, they also find that these changes in international competition affect jobs and employment in more complex and substantive ways than was previously understood. Their examination of almost 20 years of manufacturing data (1975–93) provides strong evidence that the U.S. economy's openness has increased substantially over time. However, their econometric analysis of the effect of this international openness on jobs finds that the impact is much more complex than a simple examination of net employment change would reveal. For example, exchange rate changes affect both job creation and destruction, but these effects differ depending on whether the