

SOCIAL SECURITY RULES AND LABOR FORCE PARTICIPATION OF OLDER WORKERS: EVIDENCE FROM CHILE

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The experience of Chile, which radically changed its social security system in 1981, offers an opportunity to test whether large system changes produce large labor supply changes. In a previous study based on changing behavior of successive cohorts that were increasingly exposed to the new social security system, we found that younger cohorts postponed pensioning and had a higher labor force participation rate than older cohorts—evidence that increasing new-system membership raised work propensities (Edwards and James 2008). This paper revisits this topic using individual-level data. Unlike the previous paper, which focused on men, we are able to include women in the current analysis.

Prior to 1981, Chile had a traditional pay-as-you-go defined-benefit (DB) system that included disincentives to work among older individuals, similar to those found in many European countries today. Contribution rates were high, allowable pension ages low and benefits did not change commensurately with incremental contributions or postponed pensions. Workers had strong incentives to start their pensions as soon as possible because this maximized their lifetime net benefits, and labor force participation dropped dramatically when pensions started. This changed with the 1981 reform, which reduced the pension payroll tax, replaced the DB system with a defined-contribution (DC) system and included several other important changes expected to raise the labor force participation rates of older individuals. Workers then in the labor force had a choice between staying in the old system or switching to the new system. New entrants to the labor force had to join the new system. Thus, for some time the two systems have coexisted, although the old system is gradually being phased out and an increasing proportion of workers belonged to the new system after 1981.

Pre-reform Chile looked like many European countries today—with early and declining age of pension and withdrawal from the labor force. These incentives, constraints and trends were sharply reversed in 1981, when a new pension system with pro-work incentives and constraints was adopted. We hypothesize that participation rates of older workers will increase due to: (1) Greater incentives for pensioners to continue working because the new system eliminates restrictions that existed previously and exempts pensioners from the pension payroll tax; (2) Greater actuarial fairness, which may lead to postponed pensioning and higher participation rates of non-pensioners on a voluntary basis because of the smaller implicit tax; (3) Tighter early pension pre-conditions, which constrain more individuals to remain non-pensioners and to continue working because of liquidity

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constraints; (4) An increase in the number of years of eligibility (from 10 to 20 years) required for the minimum pension guarantee may further encourage low earners (disproportionately women) to postpone pensioning and withdrawal from the labor force; and (5) Married women and widows were encouraged to work longer because they were able to keep their own pension in addition to the survivor's benefit, whereas previously they faced a 100 percent tax on their own pension in order to get survivors' benefits.

To carry out this analysis we draw on a retrospective sample of new and old system affiliates conducted in 2002, 2004 and 2006 (EPS 2002, 2004 and 2006), which gives us their work histories and demographic data going back to 1980. We use probit analysis of the behavior of a panel of about 6,000 older men and women who were born 1931–56 and whose histories were observed retrospectively for the period 1980–2006. We study their pension and work behavior at ages 50–70. Our main findings: Labor force participation rates rose dramatically and pension age was postponed among new system affiliates. This holds for most subgroups but it is strongest for pensioners and women. Non-pensioners work longer than pensioners, but their participation rates did not increase as much so the gap narrowed after the reform. These behavioral effects of the reform remain after controlling for many individual and time-specific covariates.

These results have important policy implications. They suggest that, regardless of other features of the system, the labor supply of older individuals can be increased substantially by (1) raising the reward that older individuals receive for working, for example by exempting them from the pension payroll tax; (2) raising the earliest allowable age for pensioning or doing so automatically and gradually by tying pension age to life expectancy; and (3) financing survivors' benefits in a way that makes it feasible for women who have worked and contributed to keep their own pensions as well. Countries that wish to retain older individuals in the labor force might consider adopting these policies.

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