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The Effects of Means-tested, Noncontributory Pensions on Poverty and Well-being: Evidence from the Chilean Pension Reforms

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We study the effects on labor supply and well-being of a major reform introducing means-tested, noncontributory pensions and changes in the incentives in the contributory tier of the privately managed Chilean pension system. Introduced in 2008, the reforms were intended to guarantee a minimum level of consumption upon retirement, prevent old-age poverty, and reduce gender inequalities, while at the same time increasing the contribution rates among workers who typically did not contribute. Targeted at individuals older than 65 living in households in the bottom 60 percent of the income distribution, reforms included a noncontributory welfare pension (the Pension Basica Solidaria, PBS) of US$125/month, and a supplemental top-up (the Aporte Previsional Solidario, APS) for individuals with a low self-financed pension, which was phased-out as the private pension increased. Additional welfare measures targeted gender inequalities and included bonuses for each child born, compensations upon divorce, and the implementation of survivorship pensions.

To investigate from a life-cycle perspective the reforms' effects on outcomes, we estimate the behavioral responses in labor supply, consumption, and well-being, in response to changes in expected pension wealth and accrual rates induced by the reform for individuals at different points in the life cycle. To do so, we use four waves of the Social Protection Survey (2004-2012), which provides pre- and post-reform longitudinal information about labor market participation, labor informality, self-employment, household expenditures, physical and mental health, and subjective well-being for a sample of 7,345 men and women. Measures of expected pension wealth and accrual rates for each individual in our sample were forecasted using rich, monthly information on contributions and wage profiles merged from administrative records provided by the Chilean

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Pension Supervisor. To account for potential endogeneity of expected pension wealth and accrual rates, we used as instrumental variables the interactions of group dummies and year dummies reflecting the differential impact of the reform across different segments of the population. To date, the only reform impacts that have been previously studied included participation in formal labor markets using data until 2009. At that time, only a small fraction of individuals had taken-up the different benefits the new pension scheme offered.

Our preliminary results suggest that an increase of $100,000 Chilean pesos in expected pension wealth induced by the reform, equivalent to US$150, would not change labor market participation among men, out would reduce female labor market participation by 3 percent, due to a negative income effect. However, for individuals that continued to work, a change in expected pension wealth of the same magnitude would reduce different indicators of labor informality. Among women near retirement (55 years old), a US$150 increase in pension wealth would increase the probability of contributing to the pension system by 2.7 percent and the probability of having a contract by 3.2 percent, and would reduce self-employment rates in 1.7 percent. Among men near retirement, an increase in expected pension wealth of that magnitude would increase the probability of having a contract by 1.5 percent and would reduce self-employment by 1.7 percent. Observed changes in labor supply are larger among older individuals near retirement than for younger workers.

Our findings suggest that the pension reforms had limited impacts on other outcomes. An increase in expected pension wealth of US$150 would increase monthly household expenditures in food, domestic help, utilities, and clothing, although the economic magnitude of these increases is relatively small (between US$2 and US$5 per month). Among medical expenditures, women would increase significantly the average number of dental care visits over the last two years. Regarding subjective measures of health among men, it would improve self-perception of good health by 3 percent, would reduce the probability of feeling depressed by 6 percent, and would the probability of feeling sad by 8.4 percent. However, while moving in the same direction, changes in subjective measures of health among women are not statistically significant. Importantly, our results suggest the reforms did not significantly improve other measures of well-being, such as physical health and medical expenditures for either men or women.

These preliminary results need to be read cautiously. While the analyses presented are only based on the subsample of individuals who were still not retired in 2008, when the reforms were implemented, results based on outcomes other than labor supply may change when we add the pool of individuals who were already retired in 2008, and who also benefited by the reforms. This analysis is work in progress.

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