

Understanding Why Seniors Stay or Exit the Labour Market: Evidence from the Chilean Pension Reform

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Paper Abstract: For the past 30 years Chile has been in the top ten list of fastest growing countries. Concurrent with economic growth, life expectancy has increased sizeably and the birth rate has dropped uninterruptedly for the past three decades. By 2012, income per capita reached US\$ 22,000, life expectancy had increased to 79.6 (comparable to 79.0 in the USA). Similarly, the birth rate in Chile has fallen to 1.83% per woman in 2012, again comparable to 1.88% for the USA. As a result of both, the proportion of old-age people has increased steadily, a phenomenon already experienced by developed nations. In 1985 2.4% of men were 65 or older, and 4.8% of women were 60 or older. By 2014 these numbers had doubled, to 4.7% in case of men and 8.5% for women.

As the population grows older, the relevance of the senior decision on whether to stay, exit or possibly re-enter the labour market is becoming increasingly important. This paper searches to understand the factors that explain why seniors stay, exit or re-enter the work force. In this context, in 2008 the system was reformed by the creation of a minimum universal pension that provides a monthly payment to every senior who does not have a pension. This payment is provided independent of whether you made or not previous social security contributions, and is independent of your spouse's income. Additionally, the reform also provided transfers to some vulnerable groups of the society that seek to increase pension payments to those that had insufficient social security contributions to reach minimum wage equivalent pensions. This issue is studied through a Probit model which estimates the probability of working for an adult aged 60 and over for men and 65 and over for women. Preliminary results indicate that in 2004, old age pension recipients are 3.8% more likely to work than the rest of adults aged 60 or older, while in 2009 those who receive an old-age pension are 2.1% less likely to work than the rest of this age group thus showing some evidence of the change in incentives to participate in the labour market during those years for this group.

The effect of the reform on the labour market seems pretty strong yet it is not likely to be the only consequence. Many questions could arise in terms of the effect on the productivity or GDP due to the change in the labour market structure. In the extent that we believe that more leisure time of the older people represents an increase in well being but a decrease in GDP (which lowers the utility profitability?) there could exist a trade off where it is not easy to know which effect predominates and therefore it is not easy to draw conclusions about the desirability of the policy.

The labor participation equation below was estimated using a conventional probit formulation, so the probability of participating on the job market (working) is given by $p_{ij} = f(x_{ij} \beta)$, where $f(\cdot)$ is the CDF of a normal random variable.

The dependent variable participation is whether individual i participates on the job market. The explanatory variable vector is made up of a number of variables including education, gender, age, pension, and retirement, where the last two variables are dummies that take the value 1 if individual i receives Pension transfers and 0 otherwise and Retirement takes the value 1 if individual i receives retirement income because of his previous work history or 0 otherwise. The change in pension system law allows the econometric estimation to overcome the endogeneity problem. The preliminary results indicate that in 2004, old age pension recipients are 3.8% more likely to work than the rest of adults aged 60 or older, while in 2009 those who receive an old-age pension are 2.1% less likely to work than the rest of this age group thus showing evidence of the change in incentives to participate in the labour market.