Gender Differences in retirement behavior:
How human capital and family explain retirement decisions in Chile?

Andrea Canales – Viviana Salinas- Andrés Biehl

Latin America is ageing fast. The population aged 65 or over is expected to grow from roughly 48 million today to over 151 million by 2050; that is close to 25% of its projected population and equivalent to current levels in Europe. The burdens of providing security to an ageing population are compounded by the financial constraints that social security systems confront. Underfunded by low taxation, growing informality and unprotected formal employment hinder the individual capacity and disposition to contribute toward social security. Whilst individuals face an impending crisis, social security institutions face a critical juncture: policy makers will have to make choices that bear upon the future of social insurance and the decisions that individuals make. Solutions to increasing demands on pension systems must be looked outside the pension system (Góra, 2014), particularly in combination with individual decisions within families and labor markets.

The decision to retire occurs under a defined structure of opportunities and constraints in which two institutional settings play a major role: the labor market and the pension system. Pension systems shape opportunities in the labor market for retirement. Coordinated welfare regimes, have traditionally offered public pensions that allow workers to retire when forced out of the labor market or have incentivized workers to retire once they reach the legal retirement age. This is because pension income is often dissociated to labor market trajectories and/or contribution histories. On the other hand, liberal welfare regimes usually provide incentives to keep on working, as pension income is a function of individual savings through the work history. Regarding labor market, evidence suggest that education and better work conditions define work attachment, which is positively correlated to later retirement regardless pension incentives (Aaron and Callan, 2011; De Preter, Van Looy, and Mortelmans, 2014).

In order to understand retirement decisions and gender inequalities, some literature points out that there are *pull, push,* and *retention* incentives (Barned and Farrell, 2003; Shultz et al., 1998). Whilst pull factors refer to those conditions that promote an early exit from the labor market, such as attractive pensions; push factors refer to those conditions that force workers out of the labor market (e.g., incentives to retire, declines in health status, negative job conditions, etc.). Usually, industries in manufacture and primary sectors that are going through profound technological transformations incentivize their workers to abandon the labor market as their skills and jobs are made redundant. Finally, retention incentives refer to a set of policies that are now being introduced in certain countries to increase the age of retirement and keep workers active during old age. On the other hand, life course literature takes into account structural, social and cultural contexts to explain this phenomenon (Elder and Jonson, 2003; Moen 1996). From this perspective, retirement timing is understood as contingent on individual attributes and personal history such as life experiences that accumulate across the life course (Wang et al., 2011).

Chile offers a unique and understudied setting to investigate retirement behavior, since it is a well-known case of early market-led reform, which introduced private pension administrators (AFPs) in charge of mandatory workers' savings in individual savings accounts. This market mechanism changed a previous mixed private and public pension system based on defined-benefits to one based on defined contributions. As a result, while the labor market might incentivize early retirement, the pension system incentivizes late retirement. Pension income and replacement rates are greatly improved the longer one works and saves in the individual savings account. Each year one works and keeps contributing to the private fund after reaching the legal age of retirement could improve pension income by around 5 to 8 per cent. Poverty and inequalities in old age led to reforms of the Chilean pension system in the 2008, which offered a variety of public subsidies and support for pensioners without adequate pensions. This reform led to the introduction of a public non-contributory pillar for those with insufficient contribution densities and for those (mainly women and housewives) who did not have access to private pensions.

In this paper, we analyze retirement decisions for men and women focusing on human capital (education, type of occupation, experience, and contributory history) and family characteristics (marital status and children). We employ the 2015 Longitudinal Social Protection Survey (LSPS), a biannual or triennial longitudinal survey carried out in Chile and five other Latin American countries, which is administered to a nationally representative and randomly selected sample of each country's population and follows a panel in each subsequent wave. These data comprise detailed information about those above 18 years of age living both in urban and rural areas, with regards to demographics, human capital, contributory history (savings), and family characteristics, among others. The analytical sample comprises people who were occupied at age 50 (anytime between 1980 and 2015). Longitudinal data allow to exploring the relationship between structural constraints and individual choices. Our multivariate analysis uses the Cox regression approach. Cox models are widely used semiparametric models for continuous time, in which the time dependence of the hazard rate is left unspecified (Singer & Willett, 2003). We take advantage of this feature, because our main interest is to study the association of the family-related and human capital variables on the risk of retirement. Cox regression assumes proportional hazards, an assumption we know from our descriptive analysis that does not hold for gender. Hence, we estimate models separately for men and women. We investigate the risk of retirement for those that reach retirement age. Specifically, we analyze how people entitled to retire assess the resources they accumulate to face retirement. Therefore, we study how human capital and families shape insurance in old age. Our findings show significant gender differences in the risk of retirement. Women encounter steep obstacles to retire, work, and to contribute towards a pension. We also find differential returns of human capital and family characteristics for men and women. We conclude by discussing new questions that derive from our analyses.