

Life Cycle Accumulation and Aging Risks

Bérangère Legendre
Paris Dauphine University

Najat El Mekkaoui de Freitas
Paris Dauphine University

Motivation and Outline:

In the current context of pension reforms and population aging in OECD countries, the extent to which people are responsible for their own retirement planning increases. By implementing social security systems, European states allowed poverty among the elderly to decrease. The poverty rate among French retired households amounted to 28% in the seventies. It decreased to under 5% in the nineties. Despite the generous French Pay-As-You-Go (PAYG) pension system, public benefits are due to decrease. To face demographic challenges, reforms encourage private pension funding and increase the contributory characteristics of the pension system. Private savings is an important pillar to maintain standard of living after the retirement. However, savings, especially retirement savings, and standard of living are interconnected throughout the entire life cycle. Many exogenous factors impact simultaneously the savings capacity and the standard of living. The relationship between savings behaviour and socio-economic characteristics of the households has been extensively treated, but to the best of our knowledge, very few studies include new demographic factors linked specifically to the aging context of developed countries. We propose in this paper to analyze and to integrate new risks and aspects of the aging issue: longevity and dependency risks, and the impact of the public pension information system, which is a way to improve private financial literacy.

More precisely, we wonder what factors are associated with savings capacity and income level over the life cycle, to what extent standard of living influence the capital accumulation and especially, as Hogarth et al. (2006) asked, how much can the poor save? Conversely, we address the issue of private savings to maintain standard of living during retirement. A few questions on the French case deserve to be addressed as it constitutes a paradox: the savings rate is high, it amounts to 16% in 2009 (Eurostat), while it amounts only to 13.9% in the European Union and 15.6% in the Euro zone. But, private pension plans are not well developed because of the reluctance of the population. So we aim to provide an estimate of the savings behaviours across different ages, linked with the standard of living. Thus, using very recent French data, we seek to highlight personal and households' characteristics that could impact savings behaviour in order to define the most appropriate institutional framework that could encourage better retirement planning.

Many empirical studies show the limits of the the life cycle theory (Borsch Supan et al. 2000; Borsch-Supan and Winter, 2001; El Mekkaoui de Freitas and Oliveira-Martin, 2008). Indeed, individuals continue to save after retirement. Several reasons may be advanced: the inclusion of longevity risk and the increase of precautionary savings (Bloom et al. 2003; Sheshinski, 2004), the funding for the dependency risk (Tourdjman et al., 2006), the desire to accumulate wealth for its descendants, or to obtain some tax advantages when savings is accumulated through specific

vehicles (Bernheim et al., 2001; Bernheim et al., 2004). Saving once retired may reduce taxes, by contracting life annuities or encouraging donations during the lifetime.

Methodology and Analysis:

We use a household survey conducted in France in 2009-2010 and that documents precisely the holding behaviour within French households. We first propose characterisation of household accumulation profile in France in 2010. Asset accumulation is linked with various socio-economic characteristics. We aim particularly to highlight savings behaviours, linked with these households' characteristics, in terms of retirement planning in a country where the retirement income depends usually on the public PAYG pension system. Then, the paper estimates probit and quantile models to exhibit the determinants of savings behaviours, according to the standard of living over the life cycle in 2010.

We document the holding behaviours according to economic factors: - the current or past professional activity,- employment status, according to Carroll, Dynan and Krane (1999), the risk of unemployment has a negative impact for middle income earners, while it does not affect the level of savings for low income earners. - the standard of living. Whatever the situation of individuals in the income distribution, we find that the holding rates are often more frequent among retirees than among active individuals. Life annuities, homeownership, securities, or liquidity and savings accounts are concerned.

We take into account demographic factors. The impact of such factors has been regularly highlighted. Bernard et al. (2002) show how demographic structure and age impact the holding of life annuities or private voluntary pension contracts. Using the same survey, Arrondel et al. (2003) analyze socio-economic determinants of life insurance holding in France. They conclude that French households without children buy more annuities contracts in order to prepare for their retirement, whereas households with children prefer pure life insurance in case of death in order to protect their family. Gender, age, number of children and education impact holding behaviour (Yieh & Chen, 2000). We consider: - the household composition,- the age of the household head,- the area of residence.

New factors, relative to the aging issue deserve to be included: the life expectancy after retirement, but also the dependency or disability risk. Focusing on retirement planning, and in relation to the increasing body of literature on financial literacy, we consider the impact of the very recent pension information system in France.

Policy implications:

In the context of demographic pressures, providing information on private savings behaviours to policy makers allows the design of an adequate public framework to make the public pension system sustainable, and to encourage individuals to finance partly their retirement. To do this, the reforms have to increase the public's awareness of the challenges facing the pension system and to encourage them to make appropriate decisions regarding their pension and their savings level. Providing incentives to make individuals more responsible for their own pension funding requires a better understanding of the issues the households are facing over the life cycle, including their standards of living according to their socioeconomic environment.