

# Should I stay or should I go ? A simultaneous analysis of retirement behaviours into couples

## Research summary

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### **Abstract**

This article proposes an understanding of the intra-household decision-making process into the retirement decision which is neglected in setting up policies. Using a recursive bivariate probit, we focus on interactions within French couples. Our first results highlight the presence of an intra-household decision process through the endogenous spouse's situation and confirm the presence of heterogeneity and asymmetrical behaviours by gender. Without taking into account interactions within household, policymakers thus cannot implementing effective policies.

Key words: retirement decision, heterogeneous agents, intra-household decision-making process, concerted choice, reconcile preferences, asymmetrical behaviours

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Developed countries are facing the aging of the population. This trend leads to a reduced active population and an increasing number of inactive persons. In France, the ratio was 3 for 1 in 1975 and will be, according to projections, only 1.5 for 1 in 2060. Such evolution calls into question the sustainability of the French pay-as-you-go system.

To address this issue, several public policies were therefore implemented. The main goal is to limit the number of retirees by encouraging elderly (over 50 years) to remain in employment. In fact, the average employment rate of older workers in France was 41.5 % in 2011 versus 60 % in United States. Thus, with this low employment rate of elder workers, France has been deprived of a potential source of growth. To explain these international differences, several authors (Nickell, 1997; Abowd & al., 1999; Saint Paul, 2009) emphasize the role of institutions (all the rules on the labour market) which is particularly stronger in France. According to the literature, institutional retirement conditions create rigidities that might explain low employment rate of older worker. Thus, the presence of a legal retirement age acts as a deadline and might create a distance effect (Seater, 1977; Bettendorf & Broer, 2003; Ljunqvist & Sargent, 2008). These literature is based on life-cycle supply models and demonstrate that approaching the legal retirement age reduces incentives to take up work for seniors or to keep an elderly at work for the firm. These seems to be confirmed in France (Hairault & al., 2010).

By the same reasoning, postponing the retirement age would increase the older worker employment rate and restore the sustainability of the pay-as-you-go system by increasing the number of active people and restricting the number of retirees. Given that double dividend, several countries have decided to delay the legal retirement age, such as France. Following the 2010 reform, it has been increased from 60 years to 62 years. However, while the proportion of elder in unemployment doubled between 2009 and 2012, the senior employment rate increased only by 4.2 points.

The policy had not been as effective as it ought to be according to the distance effect framework. Life-cycle models suffer indeed from a strong assumption of agents' homogeneity: seniors differ in age but are similar in their other characteristics. At least, seniors, and more broadly individuals, are yet different especially in terms of their family situation. Cox and Jimenez (1992) demonstrate that the full impact of targeting programs to the seniors can only be effectively assessed if the behaviours of all the family members are taken into consideration.

A growing literature considers households as several individuals, with different preferences, and among whom an intra-household decision-making process takes place (Chiappori, 1992; Bourguignon & Chiappori, 1992; Bourguignon & al., 1993; Vermeulen, 2002). Considering this literature, individual cannot be treated as single decision makers because of interactions between household members with different preferences (Alderman & al, 1995). However instead

of considering this complex decision making process, policymakers neglect the diverse interests of household members leading to a failure to understand the entire puzzle of older workers' employment in Europe. Therefore, some individuals are not able to integrate the labour market as they are concerned by family obligations. As a result, some inequalities between seniors might rise by ignoring this heterogeneity in setting up policies.

Since several decades, the emerging of women on the labour market strengthen this conclusion. Women are fully integrated into the retirement decision process so couples will have to plan and bargain their retirement decisions by integrating preferences of each other. Moreover, preferences of women may differ from men and create some asymmetric behaviours by gender (Talaga & Beehr, 1995; Blau 1998). To our best knowledge, until now, couples' retirement behaviours have not been deeply analysed in Europe, and especially in France because of lack of data. Women's employment situation is indeed particularly difficult to observe correctly because they experience discontinuous careers, complicating the measure of their pension rights. However, since 2005, the Survey of Health, Ageing and Retirement in Europe (SHARE) allows to take into account the household context and to study the potentially joint decision of retirement within a couple. Our main goal with this research is to specify how different individual preferences are reconciled and lead to a household concerted choice into the retirement process and if spouses tend to withdraw jointly.

Using SHARE, we focus on the French case, as senior employment remains particularly low compared to other countries. For this reason, better understanding individual and couples' behaviour will be particularly useful in the context of pension reforms.

To fulfill that goal, our first step bring out the arbitrary between work and leisure (retirement) for men in one side and for women in another side. We use two bivariate probit models, separate by gender, to estimate the individual decision process. Thereafter, by integrating characteristics of the spouse into the initial equation of the individual we aim at apprehending the asymmetrical behaviours by gender in France, as found by the precedent literature (Talaga & Beehr, 1995; Blau 1998). Finally, studying covariance of errors terms allows us to find out externalities of preferences. If these externalities are positive with regard to leisure, thus both spouses enjoy each other's company and value more their leisure time together. In this case, decisions are complementarity, which means individuals respond to a need by having a joint action, leading to a joint departure process. Our second step focuses on interactions within the couple thanks to a recursive bivariate probit. This model takes into account the intra-household decision-making process by introducing spouse individual equation into the other household member estimate and vice versa. Our first empirical findings emphasize the presence of an intra-household decision process through the endogenous spouse's situation. Moreover,

retirement determinants appear different by gender, confirming the presence of heterogeneity and asymmetrical behaviours by gender. By considering individual as single decision makers, policymakers omit the diverse interests and the interactions between household members, thus public interventions might be inefficient. Those results confirm the necessity to analyse the retirement decision within the household rather than considering only individual behaviours. This appears essential to understand the complexity of an intra-household choice.

The next section presents the literature review. Section 3 is an introduction to the data and descriptive statistics and section 4 presents of our empirical models. Finally, in section 5 reports the results and section 6 concludes.

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