

# Public pension programmes and the retirement of married couples in Denmark

Paul Bingley<sup>a,b,c,d,\*</sup>, Gauthier Lanot<sup>e</sup>

<sup>a</sup> Danish National Centre for Social Research, Copenhagen, Denmark

<sup>b</sup> Department of Epidemiology, University of Southern Denmark, Denmark

<sup>c</sup> Economics Department, University of Warwick, UK

<sup>d</sup> Centre for Corporate Performance, Aarhus University Business School, Denmark

<sup>e</sup> School of Economic and Management Studies, Keele University, UK

Received 1 October 2006; received in revised form 7 September 2007; accepted 9 September 2007

Available online 19 September 2007

---

## Abstract

In this paper we study the economic determinants of the joint retirement process of married couples. We propose a tractable dynamic discrete choice model for retirement decisions which allows for non-trivial saving behaviour. We estimate the model on a 1% sample of Danish couples of potential retirement age drawn from a population-based administrative register. The introduction and subsequent reforms of a publicly financed early retirement programme provide us with variation in the data to insure identification of the parameters of interest: the elasticities of participation/retirement with respect to income flows. Our estimates imply a significant asymmetry in the sensitivity of retirement behaviour of men and women with respect to variation in their own, or their spouse's, income flows.

© 2007 Elsevier B.V. All rights reserved.

*JEL classification:* J26; H24; C35

*Keywords:* Retirement; Pensions; Dynamic structural model

---

## 1. Introduction

A growing fraction of people of potential retirement age are in two-earner married couples. In Europe and North America over recent decades the labour force participation rate of women of all ages has risen, and now an increasing proportion of women are reaching their 50's having had a long labour market career.

Career married couples tend to retire close together in calendar time even though they are often of different ages. Given their numerical importance and correlated behaviour, couples are the

---

\* Corresponding author. Danish National Centre for Social Research, Herluf Trolles Gade 11, 1052 Copenhagen, Denmark.  
E-mail address: [pbingley@sfi.dk](mailto:pbingley@sfi.dk) (P. Bingley).

natural unit for analysis of retirement decisions. Empirical studies have found support for different explanations of joint retirement: complementarity of leisure, correlated preferences, common shocks, shared finances and combinations of these factors.

In most empirical work there is a balance to be struck between complexity of the behaviour being represented and the amount of information contained in the data. The amount of useful variation depends upon the sampling frame, the set of controls and the institutional setting. The latter is of overriding importance when observational data is used. A majority of published pension and retirement studies use the US Health and Retirement Study (HRS). This is a very rich set of variables following a modest number of seniors each second year since 1992. The US institutional setting poses several modelling challenges. Employer-provided health insurance, re-entry to the labour force after retirement from a career job, joint taxation and joint benefits all require careful attention be paid to several simultaneous processes.<sup>1</sup>

It is the aim of this study to address some of the difficulties that have hindered couples' retirement studies to date. We set up a dynamic structural model of joint retirement decisions. This is applied to a 1% sample of career married couples drawn from 25 years of population-based longitudinal data from Denmark. The Danish context is perhaps uniquely informative because of its combination of universal health insurance coverage, individual-based programme eligibility and rare labour market re-entry. This must be contrasted with the institutions and consequent modelling difficulties that researchers using US data in particular have to face.

Furthermore, in Denmark a generous public pension programme (*efterløn*, hereafter PEW) was introduced at the end of the 1970s, with dramatic effects. Within two years, the participation rate for married men aged 61–65 fell from 70% to 50%, while the rate for those aged 54–58 remained almost unchanged. Eligibility to the programme was not exogenous, but was arguably pre-determined in the sense that it was a function of historical unemployment insurance contributions, which previously did not passport pension programme eligibility. These criteria were changed at different times during our sample period. Eligibility varied both within and between married couples, entitlement was all-or-nothing, and re-entry to the labour force after first receipt of PEW, meant permanent disqualification. An important contribution of this study is exploiting these discontinuities by way of carefully characterising income streams from potential future retirement ages to provide exogenous income variation that helps to identify the model.

The population-based longitudinal administrative data we use here covers 1977–2001 and does not suffer from sample attrition.<sup>2</sup> Furthermore it brings the relevant planning horizon within the observed time period for many couples. In comparison to the HRS for example, our Danish dataset can credibly sustain a good degree of model complexity.

Three broad approaches have been followed in the literature on the economic determinants of retirement. First, structural modelling of the household as a decision unit where all the elements deemed important to describe current and future retirement options are characterised in detail and embedded in a structural discrete choice model.<sup>3</sup>

<sup>1</sup> For example Van der Klaauw and Wolpin (2005).

<sup>2</sup> Emigration of older workers is negligible, and what remains is “natural” sample attrition due to marital separation, divorce and death.

<sup>3</sup> Following the seminal work of Rust and Phelan (1997), which explains the association between eligibility to health insurance and labour force participation of older individuals, Blau and Gilleskie (2004) estimate a dynamic structural model of the joint employment decision of older married couples based on the HRS. Health insurance plans are bundled with the employment contract to a certain employer and the contribution of the paper is to model how aversion to the risk of uninsured medical expenditure affects employment transitions. Again based on the HRS, Van der Klaauw and Wolpin (2005) set up an ambitious structural dynamic model with uncertainty for older married couples where savings decisions are the central channel through which pension specific characteristics determine the joint retirement age.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات