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Employer pay policies, public transfers and the retirement decisions of men and women in Denmark

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Abstract

The empirical retirement literature measures individual responses to variations in income flows due to public transfers, private individual or employer-provided pensions. We estimate a model accounting for the incentive effects from these sources. A dynamic structural model is extended to allow both individual and employer heterogeneity. This is applied to a Danish matched panel of workers and establishments, spanning a period of reforms to a public early retirement programme. Employer-specific compensation is found to be an important determinant of work and retirement income flows. Employer effects on retirement age are only found among sub-samples where access to public transfers is limited.

JEL classification: J26; C61; C23; C25

Keywords: Retirement; Pensions; Matched employer–employee panel data

1. Introduction

An ageing population, longer life expectancy and earlier exit from the labour force motivate interest in the determinants of retirement. Private pensions and public transfers are of increasing importance since they finance the future consumption of a growing number of retirees for a greater proportion of their lifetime. Policy interest in early retirement is almost always motivated by the large consequences for public financing of social security (Lumsdaine and Mitchell, 1999). It is less often remarked that early

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retirement is important to employers because of the human capital endowment that older workers represent.

Pensions create incentives which have consequences for retirement behaviour. The extensive retirement literature has focused largely on the incentive effects of public transfer programmes (Gruber and Wise, 1999), somewhat less on employer-provided pensions (Gustman and Steinmeier, 1998) and more recently on personal pensions (Mitchell, 1999). The novelty of this paper is the coherent modelling of retirement incentives due to each source of pension income: personal-, employer- and publicly provided. The emphasis is on the compensation policy of different employers as a retirement determinant, while coherently modelling public transfer incentive effects and allowing individual income and retirement heterogeneity.

An employer may wish to determine the retirement age of workers for several reasons. It would allow the writing of efficient long-term labour contracts and facilitate labour force adjustments. Theories of efficient labour contracts address the agency problem of asymmetric information regarding worker effort in the presence of monitoring costs (Lazear, 1979). An efficient contract is shown to involve a back-loaded or tilted tenure-remuneration profile. This increases the expected cost of shirking because alternative employment offers lower future remuneration. An important feature of back-loaded profiles is that low-tenure workers earn less than their productivity and high-tenure workers earn more than their productivity. The employer needs to limit the length of time during which older workers are able to earn above their productivity. This can be achieved through a mandatory retirement age or the accrual profile of a defined benefit employer-provided pension plan.

Alternatively, employers may wish to induce early retirement rather than impose lay-offs when facing adverse demand shocks. Employers can carry this out by altering defined benefit pension accrual, or offering retirement plans which provide higher accrual for certain age groups for a limited time (Lumsdaine et al., 1992). Also, unexpected positive technology shocks may accelerate older workers' skill obsolescence (Bartel and Sicherman, 1993). While retraining is costly in general, older workers are at a disadvantage relative to younger cohorts, since such an investment has to be recouped over a shorter period of time.

These theories suggest that the distribution of productivity between establishments should be reflected in the distribution of retirement age between establishments. Hence establishment-specific policies are important determinants of individual retirement decisions. In particular, we expect a strong within-establishment correlation between retirement dates once other factors have been controlled for such as individual occupation, education and demographic characteristics. Nevertheless, where early retirement plans are financed by the State we would expect establishment-specific policies to have effects on individual decisions which are less pronounced or even non-existent. Indeed, if most workers are eligible for such programmes, it may be very costly for a single establishment to design incentive-compatible contracts which exhibit the desired features and survive the effect of a State funded scheme. [1]

[1] However, we may still find tilted tenure–pay profiles.