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Age-training gaps across the European Union: How and why they vary across member states

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ABSTRACT

In line with human capital theory, training rates decline with age but empirical evidence on the factors that mitigate against this is limited. This study addresses this gap by using Fairlie-Blinder-Oaxaca decompositions to disentangle the extent to which age-training gaps are due to directly age-related, coefficient effects and differences in observable characteristics. We analyse both workers and non-workers using data for 15 European Union countries from the European Union Labour Force Survey (2004–2010). The results show that direct age-related effects reflecting, for example, the preferences of older people and attitudes toward them are only part of the explanation for age-training gaps. For older workers significant mitigating factors are the combination of higher overall training rates and high rates of employment participation for older people. This combination of factors is found in the Nordic countries of Sweden and Denmark and in sectors that are predominately publicly owned. The longer tenure of older workers, particularly men, also works to narrow age-training gaps. In contrast, the lower educational base of older people adversely affects their training take-up. However the most significant factors that make it more likely that an older person will undertake training are having a job in the first place and being female.

Introduction

Training and life-long learning are central to the policy debate on the labour market participation of older adults in the European Union (EU) and elsewhere. This debate is fuelled by the combination of an ageing population and workers' early labour market exits before their statutory pension age (SPA). The European Commission (2010, p. 8) recognises that training can help to promote the employment of older people but training rates across the EU decline with age (Carmichael and Ercolani, 2014; Cheung and McKay, 2010; Felstead, 2010; O'Mahony and Peng, 2008; De Grip and Van Loo, 2002). The lower training rates of older people are generally explained with reference to human capital theory and reduced incentives to train as a career end looms closer. Nevertheless there is considerable country and sector level variation in age-training gaps. This variation is not well understood because the underlying causes have not been investigated. Policy design and effective management of age-diverse organisations are therefore limited by difficulty in understanding the extent to which these gaps are attributable to direct age effects rather than workplace characteristics, other environmental or individual factors.

This is important since a range of factors other than age have been shown to impact on individuals' propensity for training and employers' tendency to provide on the job training. These include industry, occupation, union coverage, firm size, job status, educational attainment, skill-level and tenure (Carmichael and Ercolani, 2014; Grund and Martin, 2012; Lynch and Black, 1998). Some of these factors are also likely to be related to age since older people are disproportionately represented in some occupations and sectors and overrepresented among the least educated, lowest skilled and lowest paid workers (Felstead, 2010; Wooden et al., 2001; Cully et al., 2000). Large cross country differences in training propensity within Europe (Bassanini et al., 2005:6; Van Dalen et al., 2009) reflecting institutional variations across countries and sectors, also create differences in incentives and opportunities for training among older people, for example, due to differences in pension systems and scope for working longer (Blossfeld et al., 2011).

In this paper we attempt to separate out some of these potential influences by developing an empirical model that uses Fairlie–Bli

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nder–Oaxaca decompositions (Fairlie, 2006; Blinder, 1973; Oaxaca, 1973) in order to separate out overall age-training differences into individual characteristics (endowment) effects and age-related (coefficient) effects. In this analysis the former include personal qualities such as age and gender as well as occupation, workplace characteristics and wider environmental factors such as country of residence. We analyse training participation for both workers and non-workers because older people of working age are over-represented among non-workers. Including non-workers includes older people who wish to work and are involuntary unemployed but could be technically classified as 'early retired'. In the context of changes in skill demand and increases in pension ages, older non-workers may also be the group in most need of (re)training. The data are from the European Union Labour Force Survey (EU-LFS) and for the countries that were member states prior to the 2004 enlargement (the EU-15). Using fewer years of EU-LFS data, Carmichael and Ercolani (2014) confirm the significance of age-training gaps across the EU, but neither they nor others have used the decomposition methodology to explore the influence of respondents' characteristics and their environment. Though we do not deal with causal influences in a temporal Granger-causality sense (Granger, 1969) we do disentangle as far as is possible the correlates of respondents' characteristics and the resulting age-training gaps. Two measures of training are used as the subject of the analysis; a broad measure capturing all types of training activities and a measure of training that is classified as mostly work-related. The results show that type of training, gender, employment status, country, sector, occupation, educational attainment, tenure and hours of work all condition the training participation of older people. Direct age-related effects are only part of the story.

The plan of the paper is as follows. The next section describes the European labour market and policy context and "Human capital theory, age and training" outlines related theoretical perspectives. "Method" describes the data and empirical model and "Results" discusses the results. "Summary and discussion" summarises and interprets the main findings and "Conclusion" concludes.

European context

The labour market 'early exit' trend (Roberts, 2006; Hotopp, 2005; Duncan, 2003) has resulted in an average age of permanent workforce exit below the SPA in most European countries. This trend may have been fuelled in part by policies designed to fast-track old or sick employees to the social security system prior to their SPA, helping to create a disability route into retirement (Stattin, 2010). In recent years there have been signs of a reversal of the early exit trend in the EU 27 countries: the average exit age increased from 59.9 in 2001 to 61.5 in 2010 (Eurostat, 2012). However, in the face of Europe's ageing population and resulting 'pensions crisis' more needs to be done. Recent projections have suggested that the working age population in the EU will decrease by about 50 million between 2008 and 2060 (Giannakouris, 2008, p.4). This will be due in part to the retirement of the large baby-boom generation who are currently in their 50 s and 60 s (European Commission, 2010, p.5). New labour market policies need to encourage these cohorts to stay in employment for longer.

One common policy approach has been to raise the SPA, the age at which state pensions are payable (Blossfeld et al., 2011). Many countries have also raised the SPA of females in line with that of males. Another approach has been to eliminate the default statutory retirement age (SRA), as has been done in Australia, Canada, New Zealand the US and the UK. This withdraws a legal basis for dismissing older workers on the basis of age. In countries where a SRA still exists this is typically equivalent to the SPA. In the UK, recent changes to pension regulations include the abolishment in 2009 of the SRA of 65 and increases in the SPA to 66 in 2020 and 68 in 2046. In France the SRA will rise to 67 in 2020 but the early retirement age which was recently raised to 62 has been lowered back to 60. In Italy the SRA will rise from 60 to 66 and the early retirement age has been abolished. In Germany the SRA will gradually rise from 65 to 67 by 2029 with no early retirement age. In Spain the early retirement age and SRA will each gradually rise to 63 and 67 by 2027. Most of these pension reforms have only been announced in the last couple of years and, for the countries in our analysis, the vast majority of the reform announcements took place after the 2004–2010 sample period in our analysis. Nevertheless, de Grip et al. (2013) found that announced increases in the state pension age were sufficient to induce workers to revise upwards the age at which they expected to retire.

The hope is that raising the SPA will provide financial disincentives for retirement but this assumes that early-retirement decisions are largely voluntary. However, raising the SPA is likely to be insufficient without additional measures, such as training, that enhance the productivity and employability of older people. Training can mitigate human capital depreciation and skill obsolescence (De Grip and Van Loo, 2002; Groot, 1998) estimates that human capital depreciates at a rate of between 11% and 17% per annum. In line with these findings, age-training gaps have also been shown to be correlated with the inactivity rates of older workers (Zeytinoglu et al., 2007; De Grip and van Loo, 2002). Nevertheless, training rates still decline with age even though there is considerable variation in the rate of decline across EU states. Part of this variation is due to differences in institutional arrangements particularly in relation to employment policies and scope for lifelong learning as well as pension arrangements (Blossfeld et al., 2011; Esping-Anderson, 1999; Hall and Soskice, 2001). For example, training rates in the Southern European mixed-market economies are universally low while in Nordic states the social democratic commitment to full employment is coupled with strong training policies and support for lifelong learning (Carmichael and Ercolani, 2014).

Human capital theory, age and training

A negative relationship between age and training participation is predicted by human capital theory (Becker, 1964; Mincer, 1962, 1974) and the extension to the allocation of time over the life cycle (Ghez and Becker, 1975). Human capital theory assumes that decisions about investments in human capital are instrumentally rational and based on expected future costs and benefits. Empirical evidence supports the human capital theory prediction that investment in human capital is rewarded by higher wages (Dearden et al., 2006; Vignoles et al., 2004; Veum, 1995; Booth, 1991). For example, Dearden et al. (2006) find that a 1% increase in training is associated with a 0.3% increase in hourly wages. Returns to human capital investments decrease with age because productivity and wage gains are experienced for a shorter duration due to the proximity of retirement. Therefore, human capital theory predicts that older people have less incentive to train and employers less incentive to invest in their training.

This is in line with previous research that finds that older workers are less likely to take-up offers of training (O'Mahony and Peng, 2008). However, lack of motivation to train among older workers appears to be partly because they are less likely to perceive a need for training (Felstead, 2010; Lundberg and Marshallsay, 2007; Sussman, 2002; Cully et al., 2000; Guthrie and Schwoerer, 1996). Reduced motivation to train is also in line with psychological theories that predict increased work disengagement as planned