

1 Ageing and the European labour market: public policy issues

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1 Introduction

The population of Europe is ageing. By the early decades of the next century this process is likely to lead to a decline in the population of the 12 countries of the European Community, with the number of EC citizens being 2 per cent less in 2025 than it is today. This fundamental demographic restructuring is a consequence of the generally low and declining fertility rates over the last twenty years which have produced small cohorts of children and young adults while the large post-war ‘baby-boom’ cohort has moved into middle age. There has, of course, been considerable variation among EC countries in the scale and timing of this demographic change because of their different population structures and histories, and yet wider variation among Eastern European countries, several of which still have fertility rates above the replacement level. Figures 1.1(a) and (b) show that whereas in Western Europe the economically active population will reach a peak in several countries between 1990 and 2000, in Southern and Eastern Europe, as in Ireland and the US, the economically active population will continue to expand, though at a declining rate, into the third decade of the 21st century. Nevertheless, the demographic trend is common to all countries – Europe, the ‘Old World’, is becoming older.

Knowledge about this ageing of the European population is no more recent than the process itself, which began in the early years of the twentieth century as a consequence of a general fall in fertility rates from the very high levels of the nineteenth century. Political concern about the long-run consequences of this demographic trend has been a recurrent theme in the public policy of European nation states for over a century. There has been much discussion and hand-wringing over the fear of population decline, and particularly over how this might jeopardise a country’s economic and military potential (Teitelbaum and Winter, 1985;

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Figure 1.1(a) Index of economically active population, 1950–2025 (1990 = 100)
Source for Figures 1.1(a) and (b); International Labour Organisation (1986)

Zimmermann, 1989). Pronatalist policies ranging from exhortation through economic incentives to forcible restriction of contraception and abortion have been variously implemented in different European countries over the last hundred years, with consistent lack of success, in an attempt to reverse the long-run decline in the population growth rate (Höhn, 1987).

Public policy interest in the more specific issue of population ageing, which is itself an inevitable consequence of a long-term fall in the rate of growth of the population, is, however, a much more recent phenomenon. An ageing population implies an increase in the number of older persons to be supported and cared for by public pensions and medical services, and it is these public expenditures and their associated tax liabilities that have dominated public discussion of ageing in the 1980s (for instance, OECD, 1988a, 1988b). Considerable economic and political concern has been expressed over projections that by 2030 the necessary social security tax rate in countries such as Germany and France might have to rise to

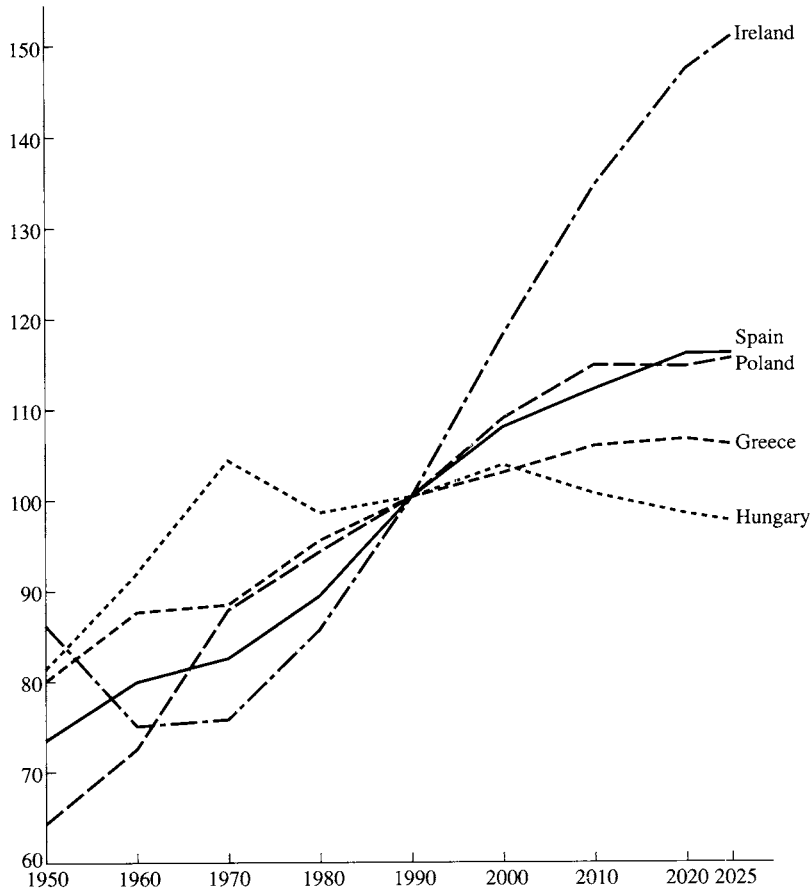


Figure 1.1(b) Index of economically active population, 1950–2025 (1990 = 100)

over 40 per cent, or around twice its current level, in order for a shrinking workforce to pay for the public pensions of an expanding elderly population (Schmähl, 1989; Vernière, 1990).

But as a socio-economic phenomenon population ageing affects much more than just the social security system, and it affects the current and future welfare of all age groups, not simply that of the elderly. This is particularly the case in the labour market where the effects of population ageing are already being felt in terms of a decline in the number of juveniles entering the labour force in Europe and an increase in the number of workers in middle age. So far, however, there has been little systematic and detailed analysis of how the ageing of the European labour

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market will affect the performance and potential of the European economies, or of the role for public policy intervention in this economic-demographic system. Previous work on the inter-relationship between age structure and the labour market has focused on the declining employment prospects of older workers during the economic downturns of the later 1970s and mid-1980s and on the way public authorities have used early retirement schemes to reduce the size of the workforce and scale down the problem of recorded unemployment (Laczko and Phillipson, 1991; Kohli *et al.*, 1991). In this background paper we want to consider not how economic performance affects the employment chances of older workers, but the more general issue of how the changing age structure of the workforce in Europe over the next three decades is likely to affect economic performance, and how and whether public policy needs to respond to this demographic change.

It may be the case that substantial changes in the age structure of the workforce in Europe will have only a minimal economic impact if age is an insignificant variable in labour force performance, and even if the economic consequences of an ageing workforce are substantial, it may be concluded that supply and demand will adequately respond to the new labour market circumstances without any public policy intervention. However, the strong role age appears to play in, for instance, the determination of remuneration, and the prominence of public policy in most countries in determining the type and level of education and training, in setting minimum employment conditions and in regulating migration, all suggest that there are strong *a priori* grounds for believing both that the ageing of the labour force will have noticeable economic effects and that there will be both scope and pressure for public policy responses. In this paper we propose to do no more than sketch some of the possible public policy areas that will be affected by the ageing of the labour force in the 1990s and beyond. The inter-related nature of economic and demographic systems makes any identification of specific areas somewhat arbitrary and artificial, but it is helpful for purposes of exposition. In the next four sections we will consider how the ageing of the European labour force may affect labour costs and productivity, training and skill, retirement behaviour, and labour mobility and migration, and how public policy may interact with these economic effects.

2 Labour costs and productivity

The ageing of the labour force in Europe is certain to put upward pressure on labour costs, and may have a negative effect on productivity. There is, in the majority of employments, a positive relationship over the life-cycle

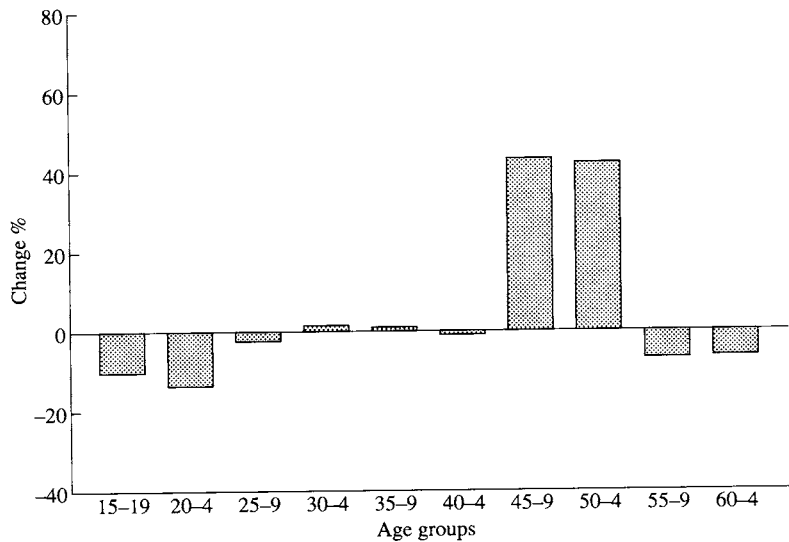


Figure 1.2(a) Changes in French population, 1990–2000 (percentage change in size of age groups)
Source: for Figures 1.2(a)–(f), World Population Projections (World Bank, 1990)

between age and earnings. In many countries, as in Britain, this relationship is stronger for male than for female workers, and stronger in non-manual than in manual jobs, but it seems to be deeply-entrenched and of long standing, particularly in larger organizations with bureaucratic personnel management structures (House of Commons, 1988). Wage growth tends to be faster for workers aged 20–45 than for those aged 45–65, so the individual age-earnings profile flattens out in middle age. This pattern is often obscured in cross-sectional age-earnings data, which normally show a hump-shaped profile resulting from general increases over time in real earnings for all age groups, and higher levels of skill for each generation of new labour market entrants. However, since it is the labour force aged 35–50 – the post-war baby-boomers – which will see the fastest relative growth in most European countries in the 1990s (see Figures 1.2(a)–(f), it is clear that overall labour costs will rise if current earnings differentials by age are maintained.

Will this increase be significant or trivial? This depends on how both the age structure of the workforce and the age structure of earnings change over time. Positive age-earnings profiles are a function of positive returns to both age *and* work experience, and demographic change will increase the average level of both. An estimate made for Japan (Ono, 1989–90) of the economy-wide effect of ageing on labour costs up to the end of the

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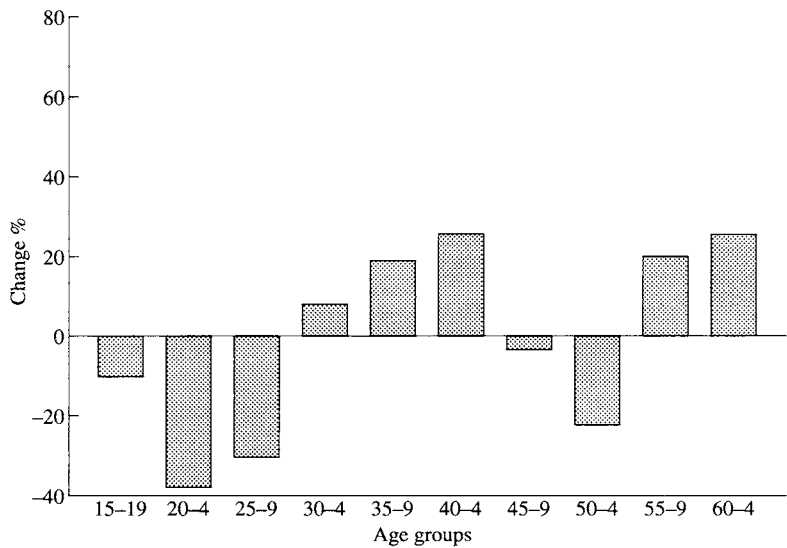


Figure 1.2(b) Changes in German population, 1990–2000 (percentage change in size of age groups)

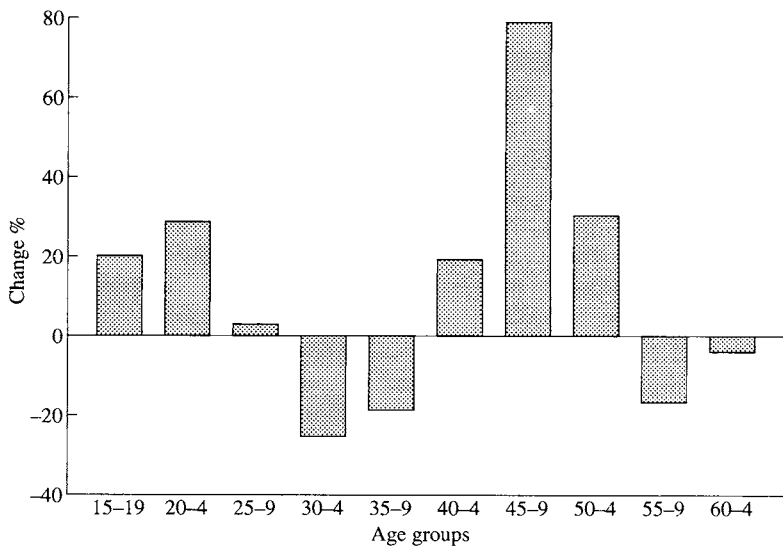


Figure 1.2(c) Changes in Polish population, 1990–2000 (percentage change in size of age groups)

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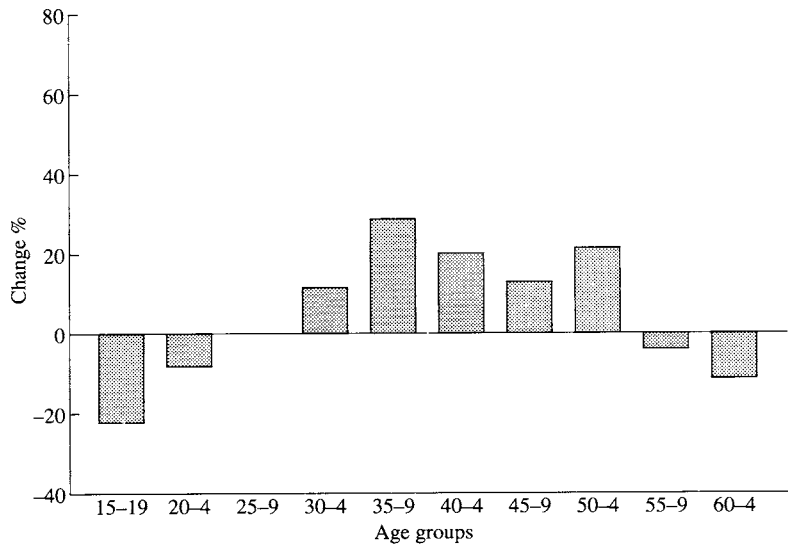


Figure 1.2(d) Changes in Spanish population, 1990–2000 (percentage change in size of age groups)

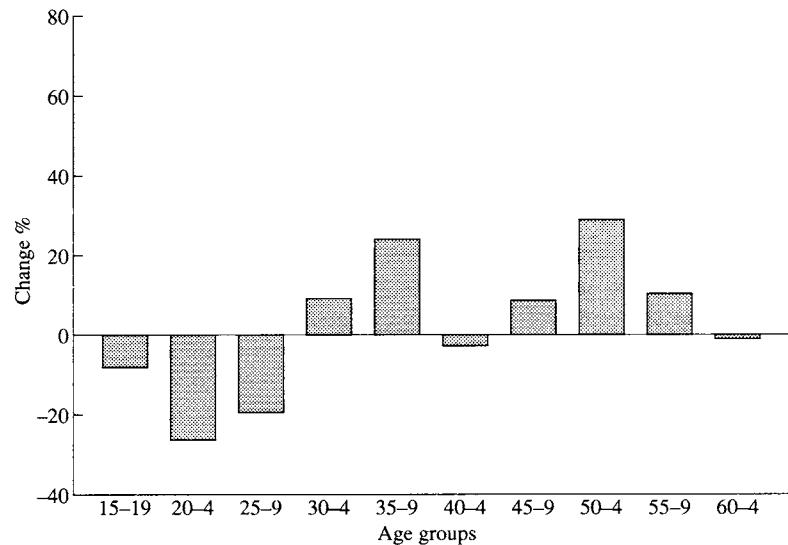


Figure 1.2(e) Changes in UK population, 1990–2000 (percentage change in size of age groups)

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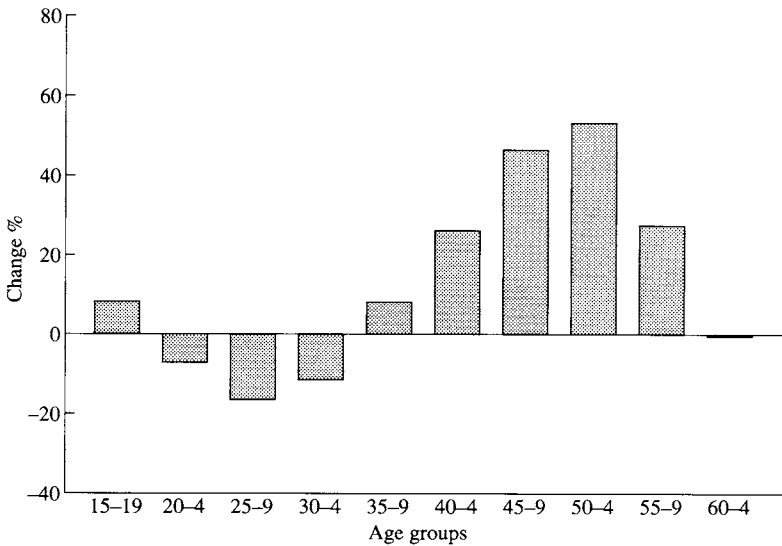


Figure 1.2(f) Changes in US population, 1990–2000 (percentage change in size of age groups)

century produces a figure of only 0.9 per cent for the pure age effect, and of 4.2 per cent for the age and experience effects combined. This is a much lower figure than was feared when the cost-push effects of an ageing labour force were discussed by the Japanese Ministry of Labor in 1976. The impact for particular firms with an age mix significantly different from that of the total labour force could, of course, be much larger. A cross-section survey of earnings in Britain in 1987 showed, for example, that average earnings of male non-manual workers aged 30–39 were 25 per cent higher than for workers aged 25–29 (*New Earnings Survey*, 1987), so young firms of the late 1980s (for instance in the information technology sector) face above average demographic wage push in the 1990s.

Future labour costs will be determined not only by changes in the age structure, but also by any changes to the existing relationship of earnings to age. In the absence of other determining factors, it might be expected that the decline in the number of young workers would drive up juvenile wage rates, while remuneration for the growing pool of workers in their 40s and 50s would suffer a relative decline. It is clear, however, that other factors are important; juvenile wages may be affected by minimum wage regulations, by restrictions on hours and type of work, and through an interaction with public and privately provided education and training. The salaries of older workers in large firms may be determined more by their position within an internal labour market than by the balance of

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supply and demand in a global labour market (Doeringer and Piore, 1971). How far seniority wage systems can respond to an increase in the relative supply of older workers by flattening the earnings/promotion ladder remains to be seen; too shallow an earnings gradient would undermine the system of deferred pay on which internal labour market management depends.

Empirical research provides no clear guidance on future trends in the relationship between age and earnings. Easterlin (1980) has proposed that members of large birth cohorts suffer reduced life-time earnings because of the greater labour market competition they face from their multitudinous peers. Attempts to test this hypothesis, mainly with US data, have produced mixed but on balance supportive results: the large youth cohorts that entered the labour market in the 1970s suffered both low relative earnings and high unemployment rates (Bloom *et al.*, 1987; Ermisch, 1988). This was, however, a period of considerable macro-economic turmoil in the wake of the 1973 oil price shock, and some of the perceived earnings effect undoubtedly derives from general labour market dislocation. Furthermore, the baby-boomers were the first generation to benefit fully from the great expansion of higher education in the 1960s, so any perceived fall in income in early working life may be no more than a deferment due to a change in lifetime earnings *profiles* rather than a change in the *level* of lifetime earnings (Riboud, 1987). Easterlin himself has noted that the income of the baby-boomers has been high and rising rapidly for much of the 1970s and 1980s, though he ascribes this to changes in their lifestyle relative to earlier cohorts – fewer children, and more dual-income households (Easterlin *et al.*, 1990). Whether these behavioural changes are a *response* to the costs of belonging to a large cohort is likely to remain an open question for some time. The Easterlin hypothesis has also received mixed evidence in Europe: Wright (1989) finds no support in a comparative study for 16 Western European countries, but Ermisch (1988) and Wright (1991) support the Easterlin hypothesis on the basis of British data. Zimmermann (1991) uses West German data to show that there is no sufficient evidence that young cohorts experience higher unemployment rates if their cohort size is relatively high.

Even if it is the case that large cohort size has depressed earnings for baby-boomers on entry to the labour market, we cannot be confident that this cohort effect will continue to apply over the next two or three decades. As cohorts mature they become much more ‘mixed-up’, so in employment terms a five-year age difference between a 19 and a 24 year old is likely to be of much greater significance than that between a 44 and a 49 year old. Moreover, as people age their remuneration is more likely

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to be determined by the operation of internal labour markets than by more general competitive pressures. The apparent trend in recent years to a clearer distinction in many European countries between core and peripheral workers could produce in the future divergent trends in age-earnings profiles, with only a small group of full-time long-term employees continuing to enjoy higher income as they age. There is, however, a substantial obstacle to such a trend in the form of existing earnings-related pension arrangements, a subject we will return to in section 4 below.

If the impact of ageing on future earnings and labour costs is difficult to estimate, then the impact of ageing on productivity is almost impossible to calculate. The widespread existence of seniority wage systems and other customary determinants of worker remuneration makes it generally inappropriate to use earnings as a proxy for productivity. Only in strict individual piece-work systems does the wage equal the marginal product; elsewhere time-rates, bonus schemes, group work and age differentials complicate the relationship. Most employers (and probably most employees) seem to believe in a rule of thumb that average labour productivity declines after some age between 40 and 50 (Staehle, 1989). This belief (which is qualified in United Nations, 1988) is used by both employers and trade unions to justify ageist hiring and firing policies. The assumption about a decline in productivity with age is so common that few attempts have been made to gather supporting evidence – why bother to prove the obvious?

If this common assumption is correct, then any age structure-induced rise in European labour costs will be exacerbated by a fall in average labour productivity as the European workforce grows older. The research of industrial and social psychologists, however, indicates that the relationship between age and productivity is certainly complex, and not necessarily supportive of popular beliefs (Rabbit, 1992; Warr, 1992). Laboratory tests reveal a clear decrement with age in average scores on complex memory and physical reaction tests, but no simple inferences about workplace performance can be drawn from experimental results, for four reasons. First, the types of tasks performed in laboratory tests – for instance memorizing lists of numbers and recalling them in reverse order – have little in common with most workplace duties. In many jobs the verbal reasoning and social skills with which older workers are better endowed are more important than quick mental recall. Second, older people can substantially improve their performance on many of the laboratory tests through practice, so training can be used to counter any age-related productivity effects, a point returned to in section 3 below. Third, although average test scores decline with age from some point in