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Employment Relations Research Series No.18

Retirement ages in the UK: a review of the literature

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The views expressed in this report are the author's and do not necessarily reflect those of the Department of Trade and Industry.

Foreword

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The Research Series is where we disseminate the results of this work. The views expressed in these publications do not necessarily reflect that of the Department. We publish these reports as a contribution towards an open debate about how we might best achieve our objectives.

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June 2003

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Executive summary

The impact of restricting mandatory retirement is likely to be modest, mainly because there is little evidence of a current pent-up demand for working beyond the normal retirement age. Concerns about the impact on productivity are not borne out by the evidence, although experience with British employers so far points to a need in some cases for strengthening of performance management systems.

- There are four main groups of reasons why employers prefer to continue to have discretion over the timing of employees' retirement: the rules of occupational pension schemes, state retirement pension arrangements, the distribution of jobs and workforce planning, and the effect of age on productivity and performance. The evidence for each of these propositions is reviewed in this report.

- Generally, the evidence that is currently available does not support the argument that it is essential to continue to allow mandatory retirement. However, that does not necessarily mean that the case does not exist at all, rather that any evidence that might support the case is not currently in the public domain, and is not therefore available to contribute to the wider debate.

When do people retire?

- Receipt of a pension is not synonymous with retirement from paid work. In practice neither the state pension age nor the normal retirement age in occupational pension schemes determines the age at which people actually retire. Some people draw a state or occupational pension and continue working. Others effectively retire before they receive either an occupational or state pension. Most occupational pension scheme members, both men and women, now have a normal retirement age of 65, and the proportion of schemes with an earlier normal retirement age is falling. Nevertheless, a majority of the UK workforce actually retire from their main jobs before they reach the normal retirement age in their employment. Although up to half the workforce is able to choose to retire later than the normal age, almost none do so. Even where people do continue working, either in their main jobs or in other jobs, few do so beyond the age of 65.

- Retirement is very popular, both with older people themselves and among those in their 40s and 50s who are looking forward to it. It is regarded as a deserved reward. Although the state pension can be drawn in full when a person over pension age has a job, only a small number of people (80 per cent of whom are women) continue working after state pension age. Nearly half the men who do so are self-employed. Only a small number of people, many of whom are self-employed, are not intending to retire at all. The proportion of people who would prefer to continue working in the same job rather than retire is always likely to be small. However, the numbers would be larger if more flexible working arrangements and better financial incentives were available to them, particularly the opportunity to continue to accrue occupational and state pension rights.

- Whether or not the power of mandatory retirement is to continue, the effect on overall employment and its distribution between older and younger workers is likely to be small, in that few people are likely to choose to continue working in circumstances where their employers would have preferred them to retire. Those who are likely to want to continue working tend to fall into two distinct groups: those who are better qualified, and who have or can obtain intrinsically enjoyable jobs which are not too stressful or challenging, and another, generally poorer, group who are motivated mainly by financial factors. Both those who are working beyond state pension age in Britain and those who are working in the United States, where mandatory retirement has been abolished, tend to fall into these two groups. Future generations may, however, have a stronger preference for working than those who are currently in their 50s and 60s, so that over time the characteristics of people who continue working may change.

The effect of age on productivity and capacity

- The evidence on the effect of age on job performance is consistent with there being no deterioration in performance in most types of work, at least up until the age of 70. The small number of people who have worked beyond this age means that it has not been possible for studies to measure the workplace performance of people over 70.

- There is no evidence to support the view that older workers are inherently less productive than younger workers, except in a limited range of jobs requiring rapid reactions or physical strength, and people tend to move out of these as they become harder for them. Only where older workers do not receive the same level of training as younger workers doing the same kind of work does their performance show differences. Older workers who receive job related training reach the same skill standards as younger workers. However, they sometimes learn more slowly, and can be helped by training methods,

which use small steps, build on existing experience and allow plenty of opportunity for practice.

Experience of British employers

- Some British employers already actively recruit and retain staff beyond the organisation's normal retirement age. Companies employing people over normal retirement age have encountered problems with pension scheme rules and with insurance cover. Such arrangements tend to set an upper age limit of 65 or 70, although exceptions are sometimes made. In larger organisations, one-year renewable contracts are not uncommon for older workers. However, under the Directive, employers will not be able to offer different contractual terms to older and younger workers. However, the most common form of contract for people over state pension age is for permanent part-time employment.

- Employers who have introduced flexible retirement schemes have generally done so in the context of performance monitoring systems which either apply to all workers (which would be permitted under European legislation) or only to those beyond normal retirement age (which would not be). It is likely that if mandatory retirement were to be abolished, employers generally might have to introduce or strengthen performance monitoring systems. In some cases, this would be likely to add to business costs, although there is no evidence about the scale of these costs. Many larger employers who do permit employees to stay after normal retirement age have found that the greatest challenge has been in changing the attitude and practice of managers in dealing with sub-standard performance. However, it is worth noting that a large proportion of people employed beyond state pension age work in organisations employing ten people or less, and less than a third work in large firms.

- Most defined benefit pension schemes do not permit the accrual of further benefits beyond normal retirement age. This is because a large share of the cost of these additional rights would be borne by the employer and other scheme members. Although younger and older workers pay the same contribution rates, the return on contributions received by older employees close to retirement is significantly larger than that received by younger workers. (This is because there is an assumption within defined benefit schemes that everyone remains in the scheme throughout their working lives, so that what they lose when young they gain when older.) An unlimited right both to remain in work and to continue to accrue pension rights in defined benefit schemes would necessarily involve allowing an older employee the unilateral right to force a greater transfer of assets than anticipated. This would impose financial costs on employers and scheme members

generally. Whatever restrictions are imposed on the employers' right to require someone to retire, it may be necessary to separate retirement from work from the way in which pension rights accumulate.

Factors influencing the timing of retirement

- Involuntary employer-initiated retirement takes place both on the grounds of age and on the grounds of redundancy. Fewer than one in ten men (and one in a 100 women) who retire are doing so solely on the grounds that they have reached a fixed age. It is likely that given a free choice, many of them would continue to retire at this point or soon after. Reluctant retirees are more likely to be drawn from those retiring under the age of 65 than from those retiring at state pension age or later.

International evidence

- Only three countries (the USA, Australia and New Zealand) and some Canadian provinces have extended age discrimination legislation to include the complete abolition of mandatory retirement, and only in the US has it been in place long enough for there to be any evidence of its effect. In Norway, mandatory retirement is not generally permitted before the age of 70, although many occupations, including half the public sector have a lower mandatory retirement age.

- In the USA, before mandatory retirement was abolished altogether the law permitted employers to require employees to retire at the age of 70. In 1986, when this power was abolished, only one-two per cent of those reaching the age of 70 were both required to retire and were willing and fit to continue working. Prior to 1978 the age limit for mandatory retirement had been 65, and no more than five per cent of those reaching 65 were retired against their will when they were fit to continue in their jobs. However, the lessons from the US may be of limited application in Europe. One of the reasons for this is that US trade unions have pursued for many years a campaign to secure full occupational pensions after 30 years of service. Accrual rates beyond 30 years are very low, so that there are strong financial incentives to retire from a career job at this point. In addition, employers are permitted under US legislation to offer retirement bonuses and other financial incentives to retire. This option would not be available to British employers under European legislation. US employers have also introduced performance testing, which would be available to employers in Britain provided it applies to workers of all ages, or was otherwise objectively justified.

- A large proportion of American workers in their 60s and 70s are either self-employed or are working in 'bridge' jobs in small and medium sized firms. Many smaller companies deliberately target older workers. In Britain, too, nearly half the men who retire after the age of 65 are self-employed, and those working beyond state pension age are more likely to work in firms employing ten or fewer people and less likely to work in organisations employing 50 or more people.

- Since the numbers of people who would prefer to work rather than retire at a particular point is likely to be small, the impact in any single workplace is likely to be limited. However, experience in American universities has shown that organisations with large numbers of employees in intrinsically satisfying, well paid work with a high level of autonomy and limited scope for performance monitoring can face difficulties. However, this seems to be at least partly due to academic tenure (which no longer applies in Britain), which does not permit dismissal on the grounds of restructuring and reorganisation.

The macroeconomy

- The macroeconomic evidence suggests that the impact of restricting mandatory retirement is likely to be very small but positive. Increasing the employment rate of older workers is likely to increase output and living standards and improve the government's fiscal position. However, reducing the extent of early retirement is likely to be more important in increasing the employment rate than restricting mandatory retirement.

About this project

- This research was carried out as part of the Department of Trade and Industry's employment relations research programme. It was undertaken by Pamela Meadows, an independent labour market and social policy economist. The research involved a literature review.

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Introduction and background

The UK Government is currently considering the best method of implementing the European Union Directive covering age discrimination in employment. It is doing this in the context of established labour market practices, an existing pattern of occupational and personal pension provision, and its associated tax regime, and a state pension scheme where retirement ages for men and women will be equalised at age 65 over the next 15 years. The Directive also allows the Government in framing its legislation to take into account its employment policy, labour market and vocational training objectives. Two of these objectives are particularly relevant:

- the 2000 European Employment Strategy which was adopted at the Lisbon summit by all EU Member States, including the UK, commits the Government to taking steps to increase the economic activity rates of older people
- the Government's commitment to improving the productivity performance of the UK economy.

Thus, in considering its options of how to treat mandatory retirement in its age discrimination legislation, the Government has to consider the potential impact of these decisions on these wider objectives as well as on the individuals and organisations likely to be most directly affected.

In considering these matters, it is also important to remember that retirement from paid work with sufficient income to live on is something that almost everyone aspires to. Leisure is a positive good and higher incomes increase the probability that someone will be able to choose to enjoy leisure. The issue is the determination of *when* somebody will retire not *whether* they will do so.

Who is affected by mandatory retirement?

Mandatory retirement is so well embedded in British employment contracts that employers and employees regard it as a given. There is only limited information available about the proportion of the workforce with retirement clauses in their contracts. The information that we have

is drawn from those approaching retirement age who were interviewed in the 1994 Retirement Survey. Table 1 shows the constraints on timing of retirement from their present jobs reported by the survey's respondents. Around a third of all respondents reported that they had no fixed retirement age and a further one in five had jobs where they could choose to retire later than normal. Thus, around half of those approaching retirement (53 per cent of men and 45 per cent of women) face an upper limit on their choice of retirement age.

1. Constraints on timing of retirement*

Retirement age in job	Men	Women	All
Fixed	16.6	13.8	15.2
Fixed, can choose earlier	29.9	22.1	26.0
Maximum only, can choose earlier	2.8	4.1	3.5
Can choose between minimum and maximum	3.2	5.1	4.2
Fixed, can choose earlier or later	7.0	6.1	6.5
Fixed, can choose later	9.9	10.3	10.1
Can retire any time after minimum age	5.6	2.1	2.4
No fixed age	28.1	36.3	32.2
All with upper age limit	**52.5**	**45.1**	**48.9**

Source: Adapted from Disney et al. (1997) *Percentage of respondents

Of the two-thirds with a fixed retirement age, whether or not they had flexibility to retire earlier or later, three-quarters of men and seven out of ten women reported that this was at state pension age. For a quarter of women, their fixed retirement age was older than 60, and for a similar proportion of men it was under 65 [Reference 28]. These figures should be treated with caution, however, as many employers have equalised retirement ages for men and women since 1994, so it is likely that the proportion of women with a fixed retirement age of 60 has now fallen.

What are the reasons for mandatory retirement?

Occupational pension schemes

One of the key reasons for fixed retirement ages is that all occupational pension schemes have a normal retirement age (NRA). Of the people interviewed in the 1994 Retirement Survey who had fixed retirement dates, 87 per cent of men and 61 per cent of women were members of occupational pension schemes [28]. In the case of defined benefit schemes, which until recently have been the standard model in Britain, the NRA is used for actuarial purposes to calculate the potential liabilities

of the scheme and consequential contribution rates. This age is also generally treated either explicitly or implicitly as the end point in the employment relationship.

One of the features of defined benefit pension schemes is that they are a challenging actuarial balancing act. The benefits an individual receives are not directly related to their contributions (or the contributions their employer makes on their behalf). The benefits relate to final salary (or an alternative formulation of earnings) and years of service. The scheme has to balance the total estimated potential liabilities, the current contribution rates for all members, and the residual liability of the employer to make good any difference. The way that the schemes are structured means that individuals gain disproportionately from service close to retirement. Thus, someone earning £30,000 a year would typically contribute £1,800 in his or her final year of service after taking tax relief into account. But this extra year's service would add an extra 1/60, or £500, to their pension in perpetuity. Thus, provided they draw their pension for at least four years, they gain an amount which is more than actuarially fair, and the employer (and younger employees contributing to the fund) have to make up the difference. Pension schemes are able to treat younger employees in this unfair way because they are structured on the basis that people will continue to be members of the scheme, and what they lose when young they will gain when older.

However, since at any one point in time the balancing of assets and liabilities in defined benefit pension funds is not actuarially fair between the different parties, the existence of a normal retirement age beyond which no further benefits can be accrued sets a ceiling on the level of costs that individual employees can impose on others. If people in defined benefit pension schemes were to be able to choose to accumulate extra years of service beyond normal retirement age, this would essentially give them the right to take money from their employers and fellow employees. This issue does not arise in the case of defined contribution pension schemes (including stakeholder pensions). In these schemes, someone's pension is related to the level of assets they have accumulated in the fund, and to the number of years over which benefits will be paid, which in turn is related to the age at which they retire. The value of each person's fund relates purely to the contributions they have made, or which their employer has made on their behalf.

In recent years there has been a marked shift towards early retirement, both employee and employer driven, and one of the consequences of this has been that the NRA has largely come to be seen as the latest point at which people retire from their main job. Furthermore, for the reasons outlined above, very few schemes permit the accrual of further benefits once someone has reached NRA, even where an employee has limited service and is therefore not entitled to a full pension at that point. Thus,

there is usually a strong financial incentive not to continue working beyond NRA in the same job, since doing so would incur the loss of the immediate payment of pension without any offsetting increase in the level of the pension that has been deferred.

The move, which is underway, away from defined benefit schemes towards defined contribution schemes means that in future the normal retirement age for a particular pension scheme is likely to become less important. Under defined contribution schemes, retirement benefits are based on what can be purchased by the value of the contributions that have been made to the scheme, together with any reinvested dividends and capital gains. The value of the pension received is actuarially based on the actual age of retirement. Drawing it earlier results in a lower pension. Drawing it later results in a higher one. The key factor is the expected period over which the pension has to be paid.

These issues are discussed further in Chapter 5.

State pension age

The second reason why retirement is embedded implicitly or explicitly in the employment contract is that many people see state pension age (SPA) as the point at which society as a whole regards it as reasonable that they should stop working (even though since 1989 the basic state pension has been payable even where someone has earnings from employment). The fact that more than three-quarters of men have a retirement age from their job that coincides with state pension age is an indicator of the strength of the association. The assumption that they will retire at SPA has been built by many people into their work-life planning from the point at which they normally start to think about retirement, usually in their 40s or 50s. In reality, it does not occur to many men that they should continue working beyond this point. Women are more likely to continue working after the age of sixty. Sometimes this is for financial reasons, not least because they may not have a sufficient contribution record to qualify for a full state pension in their own right. Sometimes it is because they are waiting until their partner retires before retiring themselves. However, around a third of women who retire after state pension age do so at the normal retirement age for their jobs [27, 95]. Since the proportion of occupational pension schemes with a retirement age for both men and women of 65 is growing, it is likely that the proportion of women who retire after the age of 60 will continue to grow.

These issues are discussed in Chapters 5 and 6.

Workforce planning

The third reason is that younger employees and trade unions (and sometimes employers too) often take the view that older workers occupying senior positions should in due course make way in order to

provide appropriate career progression opportunities for younger people. For this reason many trade unions are hostile towards employers' attempts to allow more flexible or later retirement, even where their older members would prefer to carry on working [35]. Larger employers often also argue that mandatory retirement aids succession planning and workforce planning generally, particularly where training periods are long, or workforce numbers are being reduced.

The move towards early retirement among a large part of the working population makes some of these planning arguments difficult to sustain. Voluntary early retirement is as inherently unpredictable for planning purposes as voluntary later retirement, yet employers have managed to adapt to this general uncertainty. Moreover, those who work beyond state pension age rarely do so for long. In the Retirement Survey only eight per cent of men continued to work after the age of 65 (half of whom were self-employed) and a quarter of them retired at age 66 and a further 30 per cent at 67. Three-quarters retired before the age of 70 [28]. Table 2, which is more recent and based on the Family Resources Survey, shows a similar pattern. By the time men reach state pension age only a minority are working. Around one in eight men leaves work between the ages of 59 and 61, while 17 per cent leave at age 65. [98]. This range of retirement behaviour is smaller than the range of dates at which people choose to take early retirement, and the numbers are in any case small. The evidence does not suggest that workforce planning in general is likely to be disrupted by limiting employers' ability to require employees to retire.

2. Proportion of UK population in paid employment by age

Age	Men	Women
50-54	82%	69%
55-59	68%	53%
60-64	45%	25%
65-69	13%	8%
70-74	8%	3%
75-79	4%	2%

Source: Smeaton and McKay (2003)

Where employers may encounter problems is in the filling of particular posts where an incumbent chooses to stay, blocking off a particular promotion opportunity. In these circumstances, employers would be confronted with a trade-off between the interests and rights of the individual who is being blocked and those of the individual who is doing the blocking. While this clearly presents a challenge, it is not one which is confined to those in senior jobs close to retirement. Employers regularly have to deal with incumbents whom they wish to move in order to make way for someone else. While the power to retire the incumbent

can ease the process, this option is not always available and sometimes other strategies have to be adopted.

The only workplaces where there is evidence that this issue has presented problems are American universities, where the abolition of mandatory retirement was combined with academic tenure, so that redundancy or restructuring are not available as grounds for dismissal as they are in other sectors. The British employers who have encouraged employees to continue working beyond normal retirement age have not encountered any difficulties in terms of promotion blocking.

These issues are discussed in Chapters 4 and 6.

Productivity and wages

The fourth reason which is often given in support of mandatory retirement is that older employees are more likely to have reduced productivity than younger ones. Employers who are concerned about the productivity of older workers and who do not wish to introduce performance monitoring and testing on a wide scale, generally argue that it improves the general atmosphere in the workplace if they can have a neutral basis for ending the employment relationship with honour on both sides. The alternative is to both monitor performance and terminate the employment of those who are not achieving appropriate standards. In the case of organisations that already have performance monitoring systems in place, the main challenge is to ensure that managers actually enforce existing performance standards. However, many workplaces do not have standard systems of performance monitoring, and they may need to establish and operate performance monitoring and management systems for all employees if they are to be in a position to dismiss any employees because of poor performance. There is currently no evidence about the impact of the introduction and operation of such systems on business costs.

There are two sub-elements to the issue of productivity and performance. The first is the ability of older workers to continue to do their existing job. The second relates to the ability of older workers to adapt to new technology and new working practices.

It is the issue of older workers' productivity that is embedded in the economic theory underpinning mandatory retirement, which was set out most notably by Lazear [61], although Clarence Long had actually described it 20 years earlier [64]. The principle in Lazear's model is that mandatory retirement forms an essential part of long-term employment contracts. During the early years of working life, a worker is paid less than his or her productivity merits, and during the later years, he or she is paid more. Workers do not leave during the early years as they know they can look forward to rising earnings (and a pension) if they stay. This

reduces turnover costs for employers, and also reduces the probability that workers will not make an effort. They do not leave during the later years as they are being paid more than they are worth in another job. The system is therefore only made stable by the ability of the employer to terminate the contract at the point where the firm is no longer willing to continue to pay people more than their productivity merits. In this way, they maintain a continuous flow of underpaid and overpaid workers who balance each other out. Lazear argued that the abolition of mandatory retirement in the US would therefore lead to reduced efficiency within any individual firm, as the proportion of lower productivity overpaid, older workers would rise and the proportion of higher productivity underpaid younger workers would fall.

This kind of employment contract (essentially what sociologists describe as the internal labour market model) tends to be known in the economics literature as the Lazear contract. The model provides some quite powerful theoretical arguments for the retention of mandatory retirement. However, it relies on the premise that older workers are being paid more than their productivity would justify, and there is very limited evidence to support this, and some evidence that contradicts it. First, as discussed in Chapter 3 below, in most jobs there is no difference between the productivity of older and younger workers. Few older workers remain in the kind of jobs requiring physical strength or rapid processing of new information, where productivity performance deteriorates with age. Moreover, the data suggest that, in Britain at least, older workers are not paid more than younger workers are. British workers over 55 earn on average 20 per cent less than those aged 45-54 [80]. In addition, Lazear subsequently acknowledged that the restriction of mandatory retirement in the US had not had the effect that he had expected, not least, because employers had adjusted in other ways [60].

These issues are discussed in more detail in Chapter 3.

Evidence drawn on for this report

This review considers the available evidence for employers' current retirement practices, and the potential effects, both in the workplace and in the economy at large, of limiting their powers to require employees to stop working at a particular age. (The option of retaining an unrestricted power of mandatory retirement is not available to the UK government under the Directive.) The evidence is drawn from studies in other countries of the effect of the restriction or removal of employers' power of mandatory retirement, and also from studies of workplaces where employers have chosen to take a flexible approach to retirement ages.

At present, there are three advanced countries where employers are not permitted to dismiss people on the grounds of age alone: Australia, New

Zealand and the United States of America. In Canada, mandatory retirement has been forbidden in Manitoba since 1983 and in Quebec since 1982. At a federal level, the legality of mandatory retirement is being tested through the courts. It has been ruled to be discriminatory but so far justified on social policy grounds, but this is still being contested. In Australia, although some states had earlier legislation, it was partially introduced via the Commonwealth Workplace Relations Act of 1996 and extended in 1999. In New Zealand, the relevant legislation came into effect in 1999. In both Australia and New Zealand, the abolition of mandatory retirement is generally too recent for any effects to have been measured.

In Norway, where the state pension age is 67, mandatory retirement is prohibited before the age of 70 unless an earlier age has been specified for a particular occupation. In fact, around half of state employees and a third of those in local government face a mandatory retirement age of 65 or younger. Moreover, the introduction of a national collective agreement permitting early retirement in 1989 means that around 60 per cent of the labour force are able to retire from the age of 65 (since reduced to 63), so that the reality is that most people have left the labour force well before reaching mandatory retirement age.

The limited experience of mandatory retirement legislation means that the evidence about what happens in the workplace is drawn almost entirely from the United States. In the US mandatory retirement before the age of 65 was prohibited in 1967 under the Age Discrimination in Employment Act. This was amended and the minimum mandatory retirement age was raised to 70 in 1978 and it was abolished altogether by a further amendment in 1986.

However, the US evidence has to be treated with some caution, since the terms of the US legislation, the institutional features of the labour market, and the potential sources of income available to people in retirement, have some important differences from those in Britain. Thus, for example, the US age discrimination legislation does not apply to firms employing fewer than 20 people or to people under 40, and it only includes direct discrimination. The inclusion of indirect discrimination in the European legislation means that employers in Europe will be obliged to provide stronger objective justification for any actions that affect older employees more adversely than younger ones.

In terms of access to income, there is no US equivalent of the Minimum Income Guarantee or its predecessors in terms of income-related support for people over state pension age. Thus, some older people in the US are working because they have no other source of income. US Social Security (the state retirement pension) is subject to a reduction if the recipient has more than a low threshold of income from employment,

whereas the equivalent rule for British state pensions was abolished in 1989, so that state pensions are not affected by the amount of work that someone does. Another key difference in the US is that state health insurance (Medicare) is only available from the age of 65, so that some people, including those over 65 who have younger spouses, will continue in employment longer than they might otherwise have chosen to do, in order to continue to be covered by their employer's health insurance. These differences, and others, mean that while some of the experience of the US might be found in British workplaces, some of the others are unlikely to be repeated.

The review has six parts:

- Chapter 2 reviews the current overall pattern of working beyond the age of 65 in Britain and other countries.
- Chapter 3 considers the evidence about the effect of ageing on capacity and productivity.
- Chapter 4 reviews the experience of British employers of people working beyond normal retirement age.
- Chapter 5 reviews the factors that influence individuals' decisions about the age they want to retire.
- Chapter 6 looks at the evidence from other countries, mainly the United States of restricting then abolishing mandatory retirement.
- Chapter 7 surveys the limited macroeconomic evidence about the effects of limiting employers' control over the timing of retirement.

2

When do people actually retire?

In the 1950s, most men stopped working towards the age of 70. As Table 3 shows, the average effective retirement age was around 67 in the seven countries in the table: Britain, the United States, Canada, France, Germany, Italy and Sweden. In 1960, a British man aged 65 could expect to live another 11 years. Thus, retirement for a man typically lasted around nine years. Today a 65-year-old man can expect to live another 16 years and a woman for another 19. (Life expectancy at birth has grown by more than four years, but much of this increase has come about because of the reduction in the number of deaths of people under 65.) [78] [26]

But what is also notable is that in the 1950s a large proportion of the population was continuing to work after the age at which they were eligible to draw their state retirement pensions (usually 65) in most countries. By 1980 the countries have begun to split into two groups: those where the effective retirement age has fallen to around 64 to 65 (The UK, USA, Canada and Sweden) and those where it has fallen to 61 to 62 (France, Germany and Italy). By 1995 there are three groups: the US and Sweden, where the effective retirement age is between 63 and 64, the UK and Canada, where the retirement age is between 62 and 63, and the other three countries where the effective average retirement age is around 60. In all cases the effective retirement age is below the age at which people are eligible to draw their full state pension, although in some cases, for example the USA, those who retire before the official state pension age may be able to draw a reduced state pension.

For women, the effective retirement age in 1950 in most countries was between 63 and 65. In Canada, it was a little lower at 61.2, and in France, it was much higher at 69. By 1980 it was around 62 in the UK, the US and Sweden, and between 60 and 61 in the other countries except Italy where it was just under 60. By 1995, it was only above 60 in the United States and Sweden. Britain at just below 60 was in an intermediate position, while Canada, France and Germany were between

58 and 59. In Italy, the effective retirement age for women had fallen to 57.2. In all cases, the effective average retirement age is below state pension age.

3. Average effective age of retirement

Men	**1950**	**1980**	**1995**
United Kingdom	67.2	64.6	62.7
United States	66.9	64.2	63.6
Canada	66.7	63.8	62.3
France	66.1	61.3	59.2
Germany	65.7	62.2	60.5
Italy	66.9	61.6	60.6
Sweden	66.8	64.6	63.3
Women	**1950**	**1980**	**1995**
United Kingdom	63.9	62.0	59.7
United States	64.2	62.8	61.6
Canada	61.2	60.5	58.8
France	69.0	60.9	58.3
Germany	62.7	60.7	58.4
Italy	64.0	59.5	57.2
Sweden	65.4	62.0	62.1

Source: Blöndal and Scarpetta (1998)

However, the driving force for this fall in the effective retirement age has not been a dramatic decline in the proportion of people working beyond state pension age, or at least not recently, and not in Britain. Table 4, which covers a slightly different group of countries, shows that the proportion of British men aged 64-69 who were in paid employment has actually increased between 1983 and 1998. The proportion fell from 15 per cent in 1983 to 11 per cent in 1988, but rose thereafter, following the abolition of the earnings rule. After 1989, people drawing state pensions in Britain did not have them reduced to take account of any earnings from employment. By 1998 the proportion of men aged 65-69 who were in paid employment had risen to 17 per cent, although more recent evidence suggests that it is around 13 per cent [98].

Thus, the striking feature of Table 4 is the relatively high proportion of older men who are still employed, and the fact that there has been no overall decline in these proportions in Britain since 1983. But although the UK, Canada and the US had similar employment for 60-64 year old men in 1983, by 1998 the US was eight percentage points ahead of the UK and 12 percentage points ahead of Canada. By contrast, in both Italy and Germany the proportion was already low in 1983 and had fallen below ten per cent by 1998.

Other sources suggest that the proportion of British men aged 70-74 who are in employment is between four and eight per cent [28] [98].

4. The proportion of older men in paid employment 1983-1994*

Country	Age	1983	1988	1993	1998
Canada	60-64	56	50	43	42
	65-69	21	18	15	18
Germany	60-64	38	32	27	27
	65-69	10	7	7	7
Italy	60-64	36	36	31	30
	65-69	15	14	11	9
United Kingdom	60-64	53	49	45	46
	65-69	13	11	12	15
United States	60-64	54	52	51	54
	65-69	25	25	24	27

Source: OECD (2000) *Percentage of age group

Table 5 shows the proportion of women in paid employment at ages 60-64 and 65-69. Again the United States shows a much higher proportion at both ages: nearly four out of ten women aged 60-64 have jobs and one in six of those aged 65-69. In Germany, the proportions of women in both age groups who are working are very low: ten per cent of those aged 60-64 and only three per cent of those aged 65-69. In Canada, while a quarter of women aged 60-64 have jobs, only seven per cent of those aged 65-69 do. In Britain, the proportion of women aged 60-64 who are working has risen from one in five to one in four, and the proportion of those over 65 who have jobs rose from five per cent before the abolition of the earnings rule, to eight per cent.

The proportion of British women aged 70-74 who are still working is very small — between one and three per cent [28] [98].

5. The proportion of older women in paid employment 1983-1994*

Country	Age	1983	1988	1993	1998
Canada	60-64	24	24	23	23
	65-69	7	7	7	7
Germany	60-64	12	10	9	10
	65-69	5	3	3	3
United Kingdom	60-64	20	19	24	23
	65-69	7	5	8	8
United States	60-64	32	33	36	38
	65-69	14	15	16	17

Source: OECD (2000) *Percentage of age group

The context in which mandatory retirement is being reviewed is therefore one where a small but relatively stable proportion of men work after state pension age. A larger and growing proportion of women work after the age of 60, which is likely to continue as the state pension age increases for those currently in their early 50s and younger, and given the increases in the normal retirement age for occupational pension schemes to 65 for most women. But at the same time, a growing number of people are retiring before they reach state pension age, which in turn is driving down the effective age of retirement.

Between 1989 and 1994 in Britain, more than half of all men (two-thirds of those in professional occupations) and a third of women retired before state pension age. Of these around ten per cent were at the normal retirement age for the job, 14 per cent were either voluntary or involuntary early retirement instigated by the employer, and around 30 per cent were on health grounds. Just over a third were because of individual positive choice. One in twelve men, and a third of women retired after state pension age. Half the men continuing to work after the age of 65 were self-employed [28] [17]. More recent evidence also suggests that nearly half of all men working after state pension age are self-employed, as are 16 per cent of women [98].

Around one in ten men who were members of occupational pension schemes who retired between 1989 and 1994 did so because they had reached the fixed retirement age for their job and for no other reason. However fewer than one in 20 people who are not members of pension schemes retired only because they reached the normal retirement age in their job. Only one per cent of women retired because they had reached the fixed age for their job and no other reason [28] [103]. However, this does not imply that all those who retired at this point would have continued to work if the opportunity had been open to them. People could have retired at this point because this is when their pension benefits are maximised, or because this is the point at which they planned to retire. There is some evidence that those with occupational pension entitlements are likely to continue working at least up until the age of 60. In other words, very early retirees tend to be those without occupational pensions, and are leaving work mainly on the grounds of redundancy or ill health. [9] [10]

Evidence that is more recent suggests that only 37 per cent of British men are still working at the age of 64 compared with 57 per cent as recently as 1979. In each successive generation the tendency has been for retirement to take place at an earlier and earlier age, and those not yet retired often hope to be able to do so in their 50s. The same pattern has been observed in other countries. For women the trend has not been as marked as it has for men, but the growth in the employment rates of women over 50 has been slower than that for younger women. Half of

all women have left the labour force by the age of 59 [68] [67] [105] [17] [26].

Key issues from Chapter 2

- Most people in Britain retire before state pension age, and a large proportion retire before they reach the normal retirement age in their job.
- Only a minority (and perhaps a very small minority) both reach normal retirement age and would prefer to continue working.
- Even before the abolition of mandatory retirement, the US had a far larger proportion of people working beyond the age of 60 or 65 than is currently the case in Britain.

3

The effect of age on productivity and capacity

It is often argued that employers should be able to fix a retirement age because the job performance of older workers tends to deteriorate, and by having a fixed retirement age employers avoid the need to monitor individual performance. If this argument is correct and there is a deterioration in performance, any restriction on fixed retirement ages could add to employers' costs by obliging them to change the mix of their workforce and to include a higher proportion of people with lower productivity. Moreover, this would have a potential impact on the overall productivity of the economy. Thus, if individual productivity can be demonstrated to deteriorate after a certain age, this could provide objective grounds for continuing to allow mandatory retirement. This Chapter reviews the evidence relating to this issue.

An important part of the overall context to this discussion is the general health and capacity context within which the retirement debate is operating. Serious incapacity tends to be concentrated in the last two years of life, and those two years of incapacity are happening later as life expectancy rises. The prevalence of severe disability before the age of 80 is falling. Thus, the number of years that older people can expect to live without disability is increasing. In Britain, at age 65, life expectancy free of severe disability is now 11.8 years for men and 15 years for women. People are generally physically and mentally fit to work up to the age of 70. Dementia is rare before this age. It starts to develop in the 70s, so that by the age of 80 around five per cent of the population have dementia. After the age of 80, the incidence grows rapidly [79] [52] [70] [11].

Underlying the Lazear [61] model of employment and mandatory retirement is a presumption that productivity declines with age. Testing this empirically is quite a complex area of research, and studies tend to fall into one of four groups:

- cross-sectional analysis of wages by economists which seek to test whether older workers are paid more than their contribution to output (as implied by the Lazear internal labour market model)
- laboratory tests by psychologists and physicians which demonstrate that physical strength, memory and reaction time decline with age
- measurement of actual performance in the workplace by industrial psychologists and sociologists which generally find little or no deterioration in performance with age
- studies of older workers' human capital.

These groups are reviewed in turn below.

Cross-sectional wage studies

Under the Lazear hypothesis, if mandatory retirement had been an essential part of ensuring the efficiency of the employment contract, its removal should have seen age- earnings profiles become flatter, as employers tried to reduce the extent to which they overpaid older workers and gave them a lower incentive to remain. However, a key study by Neumark and Stock [76] found that age earnings profiles actually became steeper for younger cohorts, suggesting that mandatory retirement had not influenced the earnings profile at all.

This conclusion is consistent with the findings of the wage/productivity studies by Altonji and Williams [2], Allen [1] and Bartel and Sicherman [5], who all found little evidence that the wages of older workers are determined by seniority rather than productivity. In fact, returns to seniority per se are modest. Altonji and Williams suggest that increased earnings with seniority may in fact reflect unobserved productivity-enhancing characteristics such as experience, loyalty and commitment (and this would be consistent with the occupational psychology studies discussed in the section on studies of productivity in the workplace below). Both Allen and Bartel and Sicherman found that the rewards to seniority are higher in high technology industries than in low technology industries, and they conclude that this is likely to be accounted for by firm-specific human capital.

Two studies which matched worker and employer data sets [46] [51] found that firms employing a larger proportion of workers over the age of 55 tended to have lower productivity, although workers in this age group tended to be paid more. However, neither study took account of differences in technology between firms or used direct measures of the output of individual employees. Neither can therefore be treated as conclusive.

The overall conclusion from these studies by economists is that prior to its abolition, mandatory retirement in the USA did not appear to have allowed older workers' wages to be kept above their contribution to output. On the contrary, wages seem to have been fairly well related to productivity wherever this can be measured. The key assumption of Lazear [61] and many economists that older workers have lower productivity than younger ones is not therefore supported by the evidence. Thus, mandatory retirement is not a necessary part of any wage system where earnings rise with seniority. Where there are rising earnings — and this is by no means universal — they appear to reflect increased firm-specific human capital.

Studies of capacity and ageing

The assumption by Lazear and others that older workers have lower output than younger ones have only recently been challenged. This is because it was not conjured out of thin air, but was based on drawing inferences from research into physical and mental capacity. There have been a very large number of studies of the effect of ageing on capacity.[1] The evidence from gerontologists, especially in laboratory tests, consistently finds that on average ageing reduces:

- hearing
- vision
- lung capacity
- muscular strength
- bone structure
- speed of activity and reaction
- memory.

Some other relationships with age are also well established. Anxiety generally increases with age. However, performance in comprehension and knowledge tests tends to improve up to the age of 70 (with few studies testing subjects who are older than this). In verbal meaning tests, performance either improves with age or remains stable [73] [62] [112] [96] [52].

Some factors affect most members of an age cohort. For example, the ability to process information and react rapidly falls markedly from the 30s onwards. However, this is unusual. With most elements of

[1] Jablonski et al. [56], Levine [62], and Warr [112] all review a large number of studies of ageing, capacity and productivity. Warr alone reviewed more than 100 different studies. Thus the findings which cite these three sources are based on consistent findings across a large number of studies.

performance, the main source of observed differences between older and younger age groups is the increased range of performance. Any measured differences in average performance are based to a significant degree on the deterioration in the performance of a minority of older people. The variability in both physical and cognitive performance within the older age group is much greater than in younger age groups. In cognitive tests, some older people perform at well above the average for younger people, while others do much worse. In physical capacity tests, active 65 year olds do as well as active 25 year olds, but inactive 65 year olds do much worse than their younger counterparts do [89] [73] [62] [112] [96].

Studies of productivity in the workplace

In line with the findings from laboratory studies, there is evidence that work performance falls with age in jobs that make heavy demands on sensory perceptions, selective attention, working memory, and processing of new information, as well as in jobs requiring rapid reaction time and physical strength. However, by no means all jobs fall into this category, and not all jobs with these characteristics show a deterioration in output with age. Indeed, one of the challenges to researchers is to explain why the declines in physical and mental capacity which are well established in laboratory studies, and which were discussed in the previous section do not seem to result in markedly lower productivity in the workplace.

Three major reviews of a large number of studies on the relationship between work performance and age [112] [56] [62] all come to the same clear conclusion: there is little or no relationship between the performance of older and prime age workers who are doing the same job. Those under 25 consistently tend to have lower productivity than both groups. The age ranges studied have generally been from the late teens to the late 60s or early 70s. As few people work beyond the age of 70, very few studies based in the workplace have been able to include workers over that age. The studies have included skilled and semi-skilled factory work, piecework in leather and textiles, clerical work, insurance sales, typists, mail sorters and senior managers. The studies mainly took place between the 1960s and 1980s and took place in a number of different countries.

Where the studies did find differences in performance, they are usually small (typically a few percentage points on average). Sometimes older workers have better average performance than prime age workers have, and sometimes it is worse. Even where it is worse, most older workers have performance levels above the average for all workers. Indeed, as with some of the studies of capacity, some of the important observed differences in average performance between age groups can come about because of the very poor performance of a small number of people, rather than because a generally lower level of performance by a large number. Typically, the productivity differences within each age group are

significantly larger than those between different groups. Drawing on more than 100 studies Warr [112] concluded that the average difference in performance is zero, and therefore that there is no evidence that the deterioration in capacity with age that is measured in the laboratory translates into lower levels of performance in the workplace.

One obvious explanation is that those who are observed in the workplace are not fully representative of the range of older people. Those whose capacity is adversely affected by illness or disability tend to retire early or move to less demanding jobs. Thus, those who continue working may be drawn from the more capable end of their age groups [84] [73] [62] [89]. This is important, in that if it is true, an increase in employment levels of older workers could bring in more people with lower productivity than is observed in the existing workforce. However, employers tend to recruit different age cohorts of workers in the context of different competition from other types of work for workers in that age group. Thus, the performance of younger workers could also be affected by being drawn from a different part of the ability pool from older workers doing the same job. In particular, if the younger workers are better qualified, then any observed productivity differences may reflect education differences rather than capacity differences [112].

There is also the related possibility that the studies of the decline in cognitive function in cross-sectional studies of people in different age groups might actually be picking up a cohort effect related to educational experience. Those with better levels of education of all ages perform better on cognitive tests, and those from older age groups had poorer basic education when they were young than did younger cohorts. The International Adult Literacy Survey (IALS) [81], for example, found that older workers had lower standards of literacy on average than younger workers did. The average measured change in cognitive skills in cross-sectional studies over a 40-year age span is between five and 15 per cent, but the average change in longitudinal designs, which look at the same people at different ages, is much smaller. Future cohorts of older workers who are better educated will be unlikely to show the same deterioration in performance as past cross-sectional studies have shown [62] [89] [18].

There is evidence that older people's performance is much better on familiar tasks than unfamiliar ones, which explains why performance in the workplace on familiar tasks is better than in the laboratory. Laboratory tests involve complex activities with a rapid speed of response in unfamiliar circumstances. All of these are harder to deal with as people get older. But work is not like this. Most work tasks are straightforward and use practised skills, and there is evidence that skills which are practised are retained for longer than those which are not. In the

workplace, maximum effort is intermittent and the situation is familiar [52] [112] [62] [81].

In any case, most jobs do not make use of full mental and physical capacity. Thus, even when some capacity is lost, work demands do not reach the threshold where performance is adversely affected. Experienced or expert people can perform some tasks more or less automatically and can therefore use their cognitive capacity for other things, whereas younger workers may need to think about a wider range of tasks. Reduced speed on the part of older workers can be offset by pacing or the development of short cuts based on experience. In any case, there are very few jobs where the level of speed required is not within the capacity of older workers. It is sometimes argued that many workers have to use more skills driving to work than they do in doing their jobs when they get there [112] [116] [52] [62].

A second group of explanations consider whether older workers have other characteristics, which act as countervailing factors, which offset the productivity-reducing effects of falling capacity. The evidence based on the perceptions of managers and colleagues as well as some independent studies by researchers measuring performance in the workplace suggests that older workers:

- work harder and more effectively
- think before acting
- have better interpersonal skills
- work better in teams
- are less likely to leave
- have lower rates of absenteeism
- have better motivation
- have fewer accidents
- have more experience
- have better knowledge of the company and its products

  [73] [62] [112] [96] [52] [104] [18] [56]

While it is difficult to test, the evidence suggests that experience, personal skills and motivation all lead to higher levels of performance. Those who are still working actually like work, and those who do not like it as much are no longer in the workplace to be measured. Those who continue to work after state pension age are particularly highly motivated, and consequently have good average levels of performance. But more generally, work is not just cognitive or physical. It requires skills in prioritisation, planning and troubleshooting, as well as motivation. These are all helped by experience [112] [73].

Warr [112] has developed a fourfold typology of jobs where the negative effects of ageing on capacity do and do not apply and where the positive effects of experience on performance is likely to apply or not. These are set out in Table 6.

Jobs in the age-impaired category are those such as racing driver or fighter pilot where continuous rapid data processing and reactions are required. Other jobs in this category are those involving physical strength such as coal mining or some aspects of construction. Age-counteracted jobs are those where the positive effects of experience can offset reductions in speed or other capacity. These include a wide range of jobs, particularly skilled manual work. For example, one of the studies reviewed by Warr [112] found that older typists were slower to make each keystroke, but they processed larger pieces of text at a time, so had fewer pauses than younger workers, with the result that overall speed was the same.

6. Job types categorised by impact of ageing on performance

Task categorisa-tion	Capacity loss with increasing age affects performance	Experience can enhance perform-ance	Expected overall relationship with age (capacity & experience)	Example of kinds of work
Age impaired	Yes	No	Negative	Continuous paced data processing; rapid learning; heavy lifting
Age counteracted	Yes	Yes	Zero	Skilled manual work
Age neutral	No	No	Zero	Undemanding activities
Age enhanced	No	Yes	Positive	Knowledge based judgements without time pressure

Source: Adapted from Warr (1994)

The third group of jobs are those that are age-neutral: neither the deterioration of speed and capacity nor the increase in experience is relevant in job performance. Routine clerical jobs, retail cashiers or manufacturing operatives might be like this. The fourth job type – age-enhanced jobs — includes those where neither speed nor physical capacity is a factor, but experience enhances performance. Jobs involving knowledge and judgement without time pressure, such as some senior management jobs or academic research would fall into this category.

What is worth noting is that in only one of the four job categories does performance decline with age. In the other three types, performance can be expected either to remain the same as someone ages, or to improve.

Across the economy as a whole, technological change is reducing the proportion of jobs involving heavy work and detailed concentration, both of which can be adversely affected by age. However, what is not yet clear is whether the proportion of jobs requiring both a high level of cognitive skills and rapid response is likely to increase, since age is likely to be a factor in the performance of these [18] [70] [96].

A slightly different grouping was put forward by Hayward et al. [49] who used factor analysis to derive four groupings of job characteristics: complexity, physical demands, social skill and manipulative skill. They found that complexity is associated with later retirement, and physical demands with earlier. These can be related to Warr's age-enhanced and age-impaired categories respectively.

If retirement ages were to be based on objective job performance criteria, then it is unlikely that a common age would apply to all four groups. Some occupations within the age-impaired group such as some professional sports players would justify retirement ages in the 30s. On the other hand, in the age-enhanced group it would be difficult to argue objectively for a retirement age of less than 70.

Age and human capital

The issue of the relationship between age and investment in education and training tends to confuse two different issues: the period over which the investment by an individual or his or her employer can be recovered (which is related to expected future job tenure as well as earnings), and the physical and mental capacity of the individual to learn new skills. Employers often believe that investing in young people through training has a long payback period, whereas investing in older people does not, as they will retire soon. Moreover, if older workers are also slower to learn, this adds to the cost of training as well.

There is evidence from a wide range of sources covering many different countries, industries and occupations that employers are less willing to train older workers than younger.[2] The reasons they generally give are:

- older workers are less willing to train
- they are less adaptable
- they are less able to grasp new ideas
- they are less willing to accept the introduction of new technology
- they learn more slowly

[2] [112] [105] [48] [52] [104] [111]

- the rate of return on the investment will be too low because older workers will retire.

However, these arguments confuse two kinds of training: general developmental training, which is aimed at the long term, particularly in terms of promotion and potential, and training for immediate needs which is essential for immediate productivity performance. Where skill needs are changing rapidly, failure to train results in an immediate loss, so that training becomes an imperative rather than an option. The half-life of occupational skills used to be somewhere between seven and 14 years, but has now fallen to between three and five years. Thus, it is worthwhile investing in anyone who is likely to stay for at least this long. In fact, the average 50 year old is likely to stay for another 10 to 15 years, while the average 20 year old will stay for two or three. Therefore, in terms of investment the 50 year old is a better bet [18] [116] [112].

The question of the rate of return to employers' investment in work-related training is essentially an empirical one. It is not necessarily related to the length of the training. Some occupations could have high training costs, but a relatively rapid payback period because the skills concerned command a high price in the market for goods and services. Some ICT skills might fall into this group. Other types of training may also have high costs, perhaps for legal reasons, but relatively slow payback periods. The issue would generally have to be considered on a case-by-case basis. The legislation in different countries treats this area differently. The age discrimination legislation in the Republic of Ireland (unusually) has an exemption for vocational training where an employer can demonstrate that it would not be able to secure a reasonable rate of return. This is one of the few examples where an economic argument overrides an anti-discrimination argument. However, employers in Ireland may not just assert the rate of return would be insufficient, they have to demonstrate it. In general this is likely to involve demonstrating the rate of return they expect to get from training younger people, and also, perhaps the rate of return on alternative investment opportunities. By contrast, in Australia, the airline Qantas lost a case against someone it had rejected as a trainee pilot on the grounds of the time needed to recover their investment in his training. In Canada, a company was found to be discriminating by refusing a 40-year-old access to an apprenticeship scheme [53].

Older age groups in Britain are less likely to be interested in learning than younger people are, but in the most recent survey of adult learners, two-thirds of people aged 50-59 and nearly half of those aged 60-64 had taken part in some learning activity in the previous three years. In fact, the proportion of people over 50 engaged in non-vocational learning is the same as the proportion of younger people (30 per cent). The difference is

accounted for by lower levels of vocational learning in the older age groups [6].

Some of the difference in the participation in vocational education and training appears to be accounted for by lower employment rates. Employer-provided training goes to 46 per cent of those aged 25-44, 35 per cent of those aged 45-54 and 27 per cent of those aged 55-64 [80].

There is evidence about some of the reasons underlying the reluctance of older people to engage in education and training. Some of this is due to emotional factors – a fear of looking foolish, worries about ability to learn when they have not done so for many years, worry about their ability [75] [24] [52] [112] [111]. There is also the question of learning styles. Older people tend to feel more comfortable learning in groups, in a realistic work environment rather than a classroom, building on what they can already do, and learning in relatively small chunks followed by practice [17] [52] [111] [18].

One factor that might influence older workers willingness to engage in learning is new evidence about their comparatively poor level of basic skills. The International Adult Literacy Survey (IALS) [81] found not only that older workers had lower standards of literacy, but also that this was related to their ability to manipulate and communicate information in the workplace. Moreover, their poor basic skills were derived from the relatively poor standard of their initial education. Those with a good general education are as likely to engage in training as younger workers are. Taylor and Walker [104] found that low levels of qualifications among older workers were one of the factors in employers' reluctance to recruit or retain them. Since younger cohorts are better educated, these factors are less likely to apply to future generations of older workers.

The next question is therefore how well do older workers absorb new skills. This issue is partly related to the evidence that skills deteriorate with non-use. If people are not used to learning and have not practised it for some time, they tend to find it harder to learn. This can mean that the time taken to learn new tasks is longer than it is for younger people. Nevertheless, the evidence is clear that older people have the ability to reach the same standard in terms of performance as younger ones. They are also as likely to gain any qualifications for which their course is aiming [73] [25] [112]. One study found that a very small minority of older unemployed trainees had trouble retaining what they had been taught, especially where they were unable to practice their skills immediately. This is consistent with the cognitive evidence, discussed in studies of capacity and ageing above, that skills that are not practised can be lost more easily [25].

Several US studies suggest that training older workers in skills for advanced technology not only makes them more productive, but also encourages them to stay longer and retire later thus increasing the payback period for the investment [40] [5] [1].

The overall conclusion, therefore, seems to be that where older employers do have poorer work performance than younger ones this may be due in part to employers being unwilling to offer them training to improve their skills. This failure then becomes self-reinforcing.

Impact of an increased number of older workers on overall productive potential

There have been no direct studies of the impact of productive potential of changing the age at which individuals retire. However, in the context of the Government's commitment to increasing the proportion of older people who remain economically active, there have been a number of estimates of the effect on output and growth of increasing the proportion of older people who are in employment rather than retired. The Cabinet Office study {17} of older workers estimated that involuntary early retirement reduces GDP by around £16 billion (that is two per cent). For each reduction of one year in the effective retirement age GDP falls by around two per cent [77].

In fact, the main cause of low participation rates among older people is the trend towards retirement before the normal age for the job. Even if all mandatory retirement were to be prohibited, it is unlikely that it would make a significant difference to increasing overall participation rates. Thus, in considering the potential benefits from higher participation rates, which is what the studies reviewed have done, only a small fraction would be the potential outcome of people choosing to work beyond the normal retirement age for their job.

One of the most thorough studies was undertaken on behalf of the Group of Ten [43]. This estimated that unless labour force participation rates of older people increase from their 1995 level, or productivity increases more rapidly than it has done in the past, between 2010 and 2030 UK rates of economic growth will be depressed by around 0.2 per cent a year. In fact, there has been some increase in participation rates since 1995, but the increase has been relatively small, and is unlikely to have made much difference to the estimate, which is at the lower end of the range of effects. Other studies find that without an increase in participation rates, and savings, national living standards (GDP per head) would be lower by between 0.25 and 0.75 percentage points a year, and growth rates could be halved. Most of the effect comes through reduced participation rates,

and only a quarter through the potential impact of lower savings on investment and productivity [107] [69] [8] [79].

In order to eliminate altogether the adverse effects of ageing on growth and employment in the EU, overall population labour force participation rates would need to increase by 14 percentage points. Although this increase is large, the US achieved it between 1970 and 1995, whereas the EU rate remained constant at just over 65 per cent. The increase in women's participation rates in Europe was offset by a reduction in those for young people as they remained longer in full-time education, and for older men driven by the trend towards early retirement [69]. However, other, as yet tentative, studies suggest that feedbacks in the labour market through changes in tax rates, wages and increased investment in human capital could to a large extent ensure that the adverse effect of ageing on growth could be mitigated [39] [41].

Alternative approaches to dealing with age and performance

UK employers who have employees over normal retirement age generally have systems of performance testing in place to make sure that they meet the minimum standards for the kind of work they are doing. There are also other economy-wide arrangements in place to test the capacity of individuals in occupations or industries where health- or competence-related failures can result in public safety issues. Thus, legislation prevents people over 65 holding commercial pilots' licences and all commercial pilots are subject to medicals every six months. International legislation prohibits international commercial flying by pilots over the age of 60. Lorry drivers over 45 are subject to a medical every five years [117]. (Analogous arrangements exist for the general population in the case of drivers over the age of 70, who have to renew their licences annually.) It is generally accepted that these age limits, while discriminating against individuals, are based on the age-related increase in risk of an individual having a heart attack or stroke while in control of the vehicle or aircraft. The increased risk to the general population is deemed sufficient grounds for discriminating against individuals.

US and Canadian legislation allows employers to define the criteria that are essential for doing a particular job and then testing for them. Thus, if a job such as being a police officer requires balance, flexibility, good eyesight, agility, speed, power and endurance it is not unreasonable in law to specify these requirements and to test people's ability to conform to them, even if a smaller proportion of older than younger workers could comply with the requirements [62] [53]. Even though such requirements may be indirectly discriminatory, if they are an essential part of doing the job they can be regarded as reasonable.

Many UK employers already have appraisal systems in place which provide the basis for testing the performance of all staff, irrespective of age, on a similar basis. However, not all do, and many who do not, especially small firms with high levels of personal interaction between staff and managers, might be reluctant to introduce them. However, if employers were to lose the ability to set a fixed retirement age, they would need to have objective criteria against which they could determine whether or not someone's job performance was satisfactory. In any action for unfair dismissal brought by an employee, an employer would need to be able to offer a defence based on a system of performance management which applied equally to all employees. Thus, any change to retirement arrangements would involve employers without such systems in additional expense in terms of setting them up and operating them. While it would probably be unreasonable to require all employers to introduce universal appraisal and performance monitoring systems, it would be in employers' own interests to do so. Where an employer without such a system had doubts about an individual's performance, it would be possible for them to test the performance of all workers doing similar jobs in order to determine whether that individual's performance fell below the normal range. However, this, too, would involve costs.

Key issues from Chapter 3

- The evidence suggests that, except in a very limited range of jobs, work performance does not deteriorate with age, at least up to the age of 70. Since few people are employed beyond that age, there is virtually no evidence about work performance after the age of 70.
- The positive effects on performance of experience, interpersonal skills, and motivation generally offset the adverse effects of loss of speed, strength and memory.
- Where performance does decline with age, the falling average scores for older people seem to be driven by the marked deterioration of a small number of individuals rather than by a decline across the whole cohort.
- Older workers have the same ability as younger workers to master new skills, but they learn more slowly and can be helped by different training methods.

- Employers may need to introduce new performance monitoring and management systems, which will add to business costs.
- The effect on our national productive potential of any changes in mandatory retirement arrangements is likely to be very small.

4

Experience of British employers with employment after normal retirement age

Two recent pieces of research [35] [111] include case studies of British employers who have chosen to employ people after normal retirement age. However, even among these companies, it is rare for employers not to have any upper age limit for continuing to work. The more common approach is to create options over the date of retirement either by introducing a flexible decade, or by raising maximum retirement ages. A note of caution in considering these findings, however, is that most of the case studies involve larger employers, who are disproportionately unlikely to employ people over state pension age. Whereas half the workforce aged 25-49 works for larger organisations, only 30 per cent of those aged over state pension age do. More than 40 per cent of those over state pension age work for organisations employing fewer than ten people [98].

Many of the firms in the research have introduced the opportunity to work beyond state pension age or the company's normal retirement age under pressure from older employees, particularly women, who would like to continue working. Offering flexibility over dates is relatively simple to deliver and does not normally create any problem with pension benefits. However, for those whose motivation to continue working is that they have not worked for enough years to accrue a full pension, continuing to work after normal retirement age may not solve all the problem. Half UK occupational pension schemes permit no further accruals after NRA. Moreover, Inland Revenue rules prevent further accruals once the maximum (two-thirds of final salary or equivalent) has been reached [27].

Fourteen of 20 case study organisations in the Employers Forum on Age study had extended the company's normal retirement age. Some had done so more than 15 years ago, others in the last few years. The common thread was a desire to reduce the losses of trained and

experienced staff who wanted to continue to work. The result has been reduced turnover and associated recruitment and training costs, and lower rates of absenteeism. Some companies also believe it has improved customer service where their customer base had an older or wide age profile. Others have found that older employees with good life skills have a steadying effect on their younger colleagues. Several companies also believed that publicity for their flexible approach improved their image more generally (a benefit that would be eroded if the approach were to become more generally applicable).

One company (BT) where the effective retirement age had fallen to 52 is allowing flexible retirement as a way of trying to increase the average effective retirement age, thereby protecting the company pension fund by increasing the average number of contributing years and reducing the number of receiving years. Others, too, reported that offering greater flexibility has contributed to changing the early retirement culture in the organisation.

Only one of the EFA case study organisations (Age Concern England) has abolished the concept of normal retirement age altogether, and this only recently and for reasons of principle rather than business performance, so that there has not been sufficient experience to judge the effect. Another five have retained a normal retirement age, but allow employees to work until any age as long as both parties are happy. (All these companies also recruit people over 65 who have retired from other jobs.)

The organisations that have taken the issue furthest in terms of flexibility do not impose any special requirements on older workers, but expect them to conform to the same standards of performance and attendance as younger workers. Others impose special conditions on older workers, for example by employing those over 65 on annual renewable contracts. These arrangements would be discriminatory under the Directive because they would be applying different terms and conditions on older workers than younger. However, only one in ten people working beyond state pension age are on temporary or fixed-term contracts. This is about twice the proportion in the population as a whole, but it does not suggest that temporary contracts for older workers are pervasive [98].

The more common pattern is to for companies to allow retirement at any age between 60 and 65 (or in some cases 70), with the choice being in the hands of the employee, but generally subject to veto on the part of the employer on a variety of grounds. These include: inadequate performance, attendance, succession planning, medical grounds, and operational needs.

In reality in all the organisations included in the case studies only very small numbers of employees have chosen to work beyond normal

retirement age, and particularly few are working beyond the age of 65. One government department employing 4,500 people has only 55 employees over the age of 60. A retailer with 190,000 employees has only 1600 over 65 (including some over the formal upper age limit of 70). Another retailer with 110,000 employees over 50 only has 500 over the age of 65, which works out an average of one per store.

Almost all the companies who employ people over normal retirement age cite difficulties with pension scheme rules. Many employees would like to begin to draw their pensions at normal retirement age and continue to work part-time for the same employer, but only those with rights dating back prior to 1989 can do this. Others are prohibited from doing so by Inland Revenue rules, although they are free to go and work for other employers. The Government has now recognised this anomaly in its Green Paper *Simplicity, Security and Choice* published in December 2002, and the current restrictions are likely to be eased.

However, employers report that the two main problems they have had to deal with have been convincing unions that the move is beneficial and allows more choices to employees, and training managers to actively manage poor performance of people of all ages. In many organisations, managers are reluctant to confront people whose performance is not up to the necessary standard, hoping that natural wastage or the arrival of retirement age will eliminate the problem for them. Organisations reported that they had to change this mindset and get managers to recognise that it was their responsibility to ensure that the staff for whom they were responsible were working to an appropriate level. Two of the case study companies also believed that they would have to rethink their approach to other aspects of human resources, particularly redundancies, following the introduction of flexible retirement.

It is likely that a more general move towards putting the timing of the retirement decision into the hands of the employee rather than the employer would lead to organisations more generally having to think through their approach to performance management of their staff. Any termination of employment by the employer, whether for reasons of redundancy or due to inadequate performance must be for reasons which have been applied fairly and equally to staff of all ages. If an older employee's performance were to be thought by his or her manager to be substandard, in order to justify his or her dismissal the manager would need to be able to demonstrate that the performance was below that achieved by other employees of all ages who were being retained. Organisations without performance monitoring systems, or whose systems are vague or subjective, may find that they have to introduce new systems and train both staff and managers in their operation. This will inevitably have costs for organisations. However, it may also have benefits if it leads to improved productivity, better quality management or

better motivation leading to improved retention rates. At present, however, people working beyond the age of 65 are twice as likely to work in organisations employing ten or fewer people than younger people are, and organisations this size are less likely to have formal performance management systems [98].

Some unions, and employees more generally, in some of the case study organisations have expressed concern about the potential for career blocking of younger members' progress if staying beyond the normal retirement age becomes more widespread. However, these fears have not been realised in practice in any of the case study companies. None of the organisations had more than a very small number of people choosing to work beyond normal retirement age, so that the potential for disrupting younger people's career progression was limited.

Two companies reported difficulties with insurance. Insurance contracts are exempted from the age discrimination provisions of the Directive, and it is therefore possible that difficulties in arranging insurance will become more widespread. Employers are typically arranging two kinds of insurance: employers' liability insurance, which is compulsory, and insured benefits, which form part of the remuneration package. One company in the Employers Forum on Age study found that it had to subject employees over 65 to an annual appraisal in order to secure employer's liability insurance for them. This reinforces the issue of the importance of performance monitoring and appraisal when age is no longer the basis for the termination of employment. Another company found it difficult to arrange benefits such as personal accident insurance cover for employees over 65, and so had to change their standard benefit package for those to whom this could not be offered. More employers may find themselves in this situation in future, and it may mean that they have to move from a standard benefit package to a menu system where employees choose which benefit (company car, subsidised childcare, private health insurance) best suits their needs.

Key issues from Chapter 4

- Larger British employers who have positive policies towards the recruitment and retention of older workers nevertheless rarely retain them beyond the age of 65 or 70. However, only 30 per cent of those working beyond state pension age work for larger organisations, compared with more than half those aged 25-49.
- Older workers in larger organisations are generally subject to performance monitoring, and are often on short-term renewable contracts (but this is not true of people over state pension age generally). Once age discrimination legislation is in place, any

performance monitoring would have to apply to employees of all ages, which is likely to have cost implications.

- Employers have found pension scheme rules and difficulties in obtaining insurance cover a barrier to employing older workers. The Government is committed to relaxing the restrictions on re-employment of those receiving a company pension, but insurance problems may require employers to change their approach to employee benefits.

5

Factors influencing the timing of retirement

Although the context of this review is the issue of the timing of retirement being determined by employer action at particular ages, in practice most retirement in most countries is voluntary. Most people regard leisure as more desirable than work, and they prefer to be retired than continuing in paid employment. Social convention believes that it is not appropriate for people to work until they die, and that it is to their advantage, and that of society as a whole, if they are to be able to spend their final years without the pressures of work. However, retirement as a large-scale phenomenon is both socially determined and relatively recent. Moreover the ability to retire while still in good health and able to enjoy leisure is widely perceived as being an important element of social progress [105] [42] [50].

Underlying the decisions of individuals about the age at which they retire lies an important implicit social contract between the generations, which has developed over more than a century. In the 19th and early 20th centuries, people either used to work until they died or stopped work and became dependent on the charity of their families. Retirement from work came about because a social consensus developed that people who had toiled for a lifetime had earned a few years rest at the end of their lives supported by the collective efforts of younger generations, either through the state or through the efforts of younger workers in the company. Thus, although retirement involved a transfer of resources from one generation to another, this transfer became the centre piece of the development of the welfare state, even in the United States, where the welfare state has been less all embracing than in most other advanced countries.

The state pension age influences people's expectations of when they will retire, although a majority retire before they reach it. The average retirement age for British men in the 1990s was 62, while that for women was 58. Two-thirds of men expect to retire at 65, and a third of women expect to retire at 60. A surprisingly large proportion of people (a third of women and one in five men) are not sure when they will retire. Moreover, half of all individuals retire when they expect to, and two-thirds within a

year of their expected retirement date. Around a quarter retire earlier than expected, and one in 12 men and one in eight women retire later [28] [31]. There is evidence that each recent successive age cohort expects to retire at a younger age than the one which precedes it [67] [103]. That is not to say that these choices will automatically hold for future generations, nor that those who are currently in their 40S and 50S will make the same choices as those who are currently in their 60s. Future generations may have a stronger taste for work (or may be less willing to take the drop in income that retirement brings).

Around one in ten male occupational pension scheme members who had retired between the 1998/9 and 1994 waves of the Retirement Survey did so because they had reached the age laid down by the scheme and for no other reason. However fewer than one in 20 people who are not members of pension schemes retired only because they reached the normal retirement age in their job [28] [103]. However, this does not imply that the retirement at this point was involuntary, even for those who gave reaching a fixed age as their only reason for retiring. People could have retired at this point because this was when their pension benefits are maximised, or because the fixed age had been factored into their planning. The US experience before the abolition of mandatory retirement, discussed in Chapter 6, suggests that only around half of those who retired on reaching normal retirement age would have preferred to continue working, and only a minority of those were physically fit enough to do so. Thus, these figures are likely to represent the upper limits of the number of people who might be affected by any change in the rules governing mandatory retirement. Moreover, these reluctant retirees are generally more likely to be drawn from the one in four men whose fixed retirement age was under 65. In other words, the younger the fixed retirement age, the more likely that someone retiring is doing so reluctantly. The move by pension schemes to increase the normal retirement age of both men and women to 65 is therefore likely to lead to a reduction in the number of people who are retiring earlier than they would wish.

Realistically, therefore, based on US experience, we should expect that at least half, possibly more, of these fixed age only retirements would continue to take place at the same point as before. Among those who would prefer to continue working, the US evidence (discussed further in Chapter 6) suggests that they would generally have chosen to retire within the following two years.

Employers with defined contribution pension schemes are likely to take a more relaxed approach to postponed retirement than those with defined benefit schemes. This is because defined benefit schemes are based on pooling actuarial risks across the whole workforce and across an individual's working life. The contributions to the scheme as a result of

additional years of service at older ages are not enough to offset the increase in liabilities as a result of the increased multiplier. Although additional years of work also reduce the number of years over which the pension has to be paid, this is not generally enough to offset the net increase in liabilities. Thus, additional service by an older and better-paid individual distorts the actuarial balance of the scheme by falsifying the actuarial assumptions about the age profile of employees on which contribution rates are calculated. This means that there is an overall shortfall which has to be made up either by extra contributions from the employer or by higher contribution rates for all employees, including younger workers.

The counterpart of this is that in order to fund the benefits of older workers, younger employees receive a lower return on their contributions to defined benefit schemes. Thus, as far as younger workers are concerned, the higher the proportion of older workers in the pension scheme, the worse the relationship between their own contributions and their own benefits. This issue does not arise with defined contribution schemes, which are actuarially based on an individual's own contributions rather than the pooled contributions of all scheme members.

Early retirement

As indicated in Chapter 2, most people in Britain retire before both state pension age and before the normal age in their job. Although the Government is committed to trying to reverse the trend towards early retirement, it is nevertheless important to understand the reasons for it. The impact of limiting employers' power of mandatory retirement will be very small if the trend continues for most people to have stopped working before the point at which their employers would want them to retire. The other reasons for reviewing the evidence on early retirement is that it can give some indirect indicators of the characteristics of people who do not choose to retire early, and who might therefore want to continue working beyond normal retirement age. The literature on those who choose to retire later is discussed in the section on postponed retirement below, but is very limited, while the literature on early retirement is large.

The extensive literature on the factors that influence the decision to retire before state pension age is reviewed in three studies [105] [18] [94], the former two for a wide range of countries.[3] Since the dominant trend for the past twenty years has been for each successive age cohort to retire at an earlier age than its predecessors, and since this trend has led to

[3] Other useful references are [65] [72] [71] [7] [91] [8] [12] [28] [54] [92] [58] [109] [5] [83] [4] [114] [44] [29] [31] [10] [103] [98]

concern about the loss of productive potential and the implications for government fiscal balances, it is not surprising that this has been the main focus of research on the retirement decision.

Early retirement from a particular job takes place for three broad reasons:

- involuntary termination of employment on the initiative of the employer
- voluntary termination of employment initiated by employer and accompanied by financial incentives
- voluntary termination of employment on the employee's own initiative.

The last two groups — that is those where there is some element of voluntary choice in the decision — tend to be influenced by four groups of factors. The following list of factors is largely adapted from [105] with some additions from other studies. It is striking that studies from the UK, US, France, Germany, Australia, the Netherlands and the Nordic countries all tend to reveal the same list. Although the relative size of the effects varies, the direction is consistently the same. The factors in the groups interact with each other, so that factors in one group can be offset by factors in another group. Thus, a change in the structure of financial incentives can influence behaviour even if none of the other factors change.

Personal circumstances

Those with lower education and skill levels tend to retire before those who are better educated and more highly skilled. Ethnic minorities and immigrants tend to retire before white people and those who are native born. People with dependent children are less likely to retire early, no doubt because they have higher levels of financial commitments. Single women tend to retire later than married women do, although the marital status of men is not generally a significant factor. Those who have strong leisure interests and take a positive approach towards leisure tend to retire earlier, as do those whose friends and relatives are also retired.

Factors related to the workplace

Workplace factors influencing the timing of retirement fall into two broad groups: those which are likely to lead to redundancy or employer-initiated retirement, and those which are likely to lead to individuals choosing to retire early. The most important involuntary push factors are: reorganisation and technological shocks. The most important voluntary push factors are: occupational stress, repetitive or boring work, lack of autonomy, high or low challenge, physically demanding work, shift work and lack of flexibility in terms and conditions. The factors that tend to lead to later retirement are: high levels of job satisfaction, moderately

challenging work, ability to use skills and the availability of development opportunities.

Health factors

Poor health and poor health of spouse are likely to lead to earlier retirement, as is the need to care for a sick or disabled family member.

Financial incentives

The availability of occupational pensions, state pensions, state early retirement benefits or state disability benefits all lead to earlier retirement. The rules around the receipt of state pensions can influence the financial incentive to work. In the UK, the fact that the state pension is not reduced if someone has earnings from employment means that the rules here are a positive incentive to work. Occupational pension rules also have an impact, and in particular, limitations on the ability to continue to accrue benefits after normal retirement age (or sometimes before) acts as an encouragement to earlier retirement. Ownership of savings and other forms of wealth tend to encourage earlier retirement.

As a broad generalisation, pull factors tend to predominate for white collar and professional workers with occupational pensions, and push factors for manual workers. The list is useful in that it provides a comprehensive list of the factors which studies have found to influence the retirement decision. However, it is essentially a mixture of factors that are likely to lead to retirement from a particular job, and those that are likely to lead to complete retirement from all work. Although the two are obviously related, they are different. The distinction is important in thinking about the overall effects on the labour market of any change in retirement patterns. However, when we are considering the implications for any individual employer the distinction is irrelevant.

Any termination of a particular employment, whether voluntary or involuntary need not imply the cessation of paid work. Some people welcome the opportunity to retire. Others accept it but would prefer to work without actually trying to find another job. A third group do actively try and find other work but fail to do so, and therefore drift into retirement out of circumstances rather than out of choice. Thus, not all instances of 'early retirement' from a particular employer lead to retirement from the labour market. The possibilities are set out in Table 7.

7. Labour market status of people taking early retirement from an employer

Job loss type	Find new employment	Seek work but fail	Retire
Involuntary	Employed	Unemployed/ reluctantly retired	Reluctantly retired
Voluntary - employer initiated	Employed	Reluctantly or enthusiastically retired/ unemployed	Retired reluctantly or enthusiastically
Voluntary - individual initiated	Employed	Reluctantly or enthusiastically retired/ unemployed	Enthusiastically retired

Source: Author

Broadly speaking the British and international evidence suggests that those who are enthusiastically retired (the two lower boxes in the right hand column) tend to:

- be relatively well off financially including having an occupational pension
- be well educated
- have no dependent children
- have strong leisure interests.

The more reluctantly retired tend to:

- have lower education levels
- be blue collar workers
- be from manufacturing industry
- have health problems either themselves or their spouse
- have left their previous employment because of workplace push factors but have failed to find an alternative job.

There is evidence from a range of countries, particularly the UK, the US, France, Germany and Scandinavia that older workers are more likely than younger workers to experience redundancy, and potentially therefore involuntary early retirement. An important reason for this has been collusion between employers, trade unions and the state to concentrate the burden of unemployment on older workers, with a commitment by the state to compensate those affected via early retirement or disability schemes which do not feature in unemployment statistics. However, there is some evidence that employers who are perceived to discriminate on the grounds of age are more likely to make older employees redundant. Moreover, once older workers lose their jobs they often find it difficult to get another. Thus, part of the drift into early retirement comes through unemployed older people who give up trying to find work [8] [105] [104] [97] [57] [19] [22] [31].

There is some evidence that people working in industries experiencing high rates of technological change retire later, probably because they have higher levels of on the job training [5] [1]. Nevertheless, more generally, during the 1980s and 1990s, older workers were disproportionately concentrated in industries, particularly in manufacturing, that underwent restructuring and lost significant numbers of staff. Thus, an important part of the explanation for the rise in early retirement is that industries that have been shedding labour were those that were the most likely to have been employing older workers [8] [36] [37] [80]. There is also a tendency for older workers to leave their main career industries and move into other sectors in later life, particularly small firms. Half of US workers have left their main career job before the age of 60, but only one in nine retire at that point [33] [100] [95] [34].

Three-quarters of American, older job changers change either industry or occupation or both. A large proportion of these job changes result in a pay cut, not least because of the loss of wage premiums related to firm-specific skills and seniority. Many also move into small companies. Few receive any training for their new jobs, and they generally rely on making use of their existing skills [33] [95] [97]. There is some evidence that small firms actively poach older workers from larger organisations. However, the reality is that small firms tend to recruit people to do a particular job and pay them their value in that job. Larger firms with more complex internal labour markets tend to recruit young people as trainees and have relatively few vacancies for experienced workers. Thus the reality is that the job opportunities that are available to older workers are more likely to be either in small firms or in the kind of relatively casual jobs in retailing and catering which are also done by young workers [34].

There is a dearth of direct UK evidence about the proportion of retired people who would really prefer to be working. Disney et al. [28] found that 40 per cent of men and 20 per cent of women who had taken 'voluntary' early retirement between 1989 and 1994 had retired earlier than they had expected. Other research shows that satisfaction with retirement, which might be thought of as the obverse of a desire to work, depends on income, whether or not retirement was voluntary, and attitude towards leisure and hobbies [66] [50] [4].

Postponed retirement

One of the key issues in determining the impact of restricting or removing the power of mandatory retirement from employers is in establishing a profile of those who would prefer to continue working but are presently prevented from doing so by employer policies.

The first point worth stressing is that the experience of other countries, and of those who already work beyond state pension age in Britain is that

they are a small minority of older workers. They are also far from being a representative cross-section of the entire labour force. In Britain, four out of five are women, reflecting the fact that women's state pension age is currently 60. Almost a third of those women are continuing to work because the normal retirement age in their job is older than 60. Most of the women working beyond the age of 60 have retired by the age of 65, so that only five per cent of women continue working after the age of 65 [28]. Interestingly more than half the married women working beyond the age of 60 have partners who are also working [98].

The evidence has consistently shown that those working beyond state pension age in Britain generally do so for financial reasons, or because they like their work or both. Other reasons are to avoid boredom, to socialise with work colleagues and to keep well and active [28] [86] [85]. Three-quarters of those who continue working beyond state pension age do so in the same jobs that they had before. A large proportion of them both enjoy their jobs and describe their health as excellent or very good [98].

More generally, those who continue working are those who do not have the characteristics associated with early retirement (see for example [54] [98]). But those who continue working the longest generally have a small subset of those characteristics. For example, those who continue working are also disproportionately drawn from the self-employed. Disney et al. [28] using two sweeps of the OPCS Retirement Survey found that half the men continuing to work after the age of 65 were self-employed. Smeaton and McKay [98] found that it is more than 40 per cent. Miniaci and Stancanelli [72] who used the British Household Panel Survey also found that the self-employed were more likely to work beyond state pension age. US evidence too, finds that self-employed men tend to retire later [8] [91] [5] [100].

However, the direction of causality may not be entirely clear here. It is possible that those who are self-employed generally have more choice over their working arrangements than employees and therefore are able to exercise an unconstrained choice over the level of hours and effort they choose to put in. This means that they are more likely than employees to be able to retire gradually — something surveys show is particularly attractive to older workers. A large majority of those working after state pension age whether as employees or self-employed are working part-time [98].

Alternatively, those who like working may choose to become self-employed in order to continue doing so. In other words, the preference for work manifests itself in self-employment. Although all countries show a net fall in the number of self-employed people as they move into older age groups [79], this does not necessarily imply that there is no inflow

into self-employment, only that the gross outflow as self-employed people retire is greater than the gross inflow as some people move into self-employment. The evidence suggests that around 12 per cent of men and 16 per cent of women start a new business after retiring from paid employment [98].

Self-employment may also be associated with jobs that are intrinsically enjoyable. People working in occupations which provide high levels of intrinsic satisfaction — actors, authors, artists, doctors, farmers, fishermen, business owners are more likely to continue working than — other groups where retirement might offer welcome relief. Employees in professional jobs, those with higher levels of education and those who are actively engaged by their jobs are less likely to want to give them up, and are more likely to choose to postpone retirement [52] [91] [114] [12] [92].

Another group who tend to postpone retirement are those who have poor occupational pensions, and those, particularly women who have taken a career break and people who have arrived in a country as adult migrants, who do not have a full contribution record, and who therefore do not have a full state pension [10] [105] [114]. Another factor influencing later retirement in the US is having access to an employer's health insurance scheme. The state Medicare health insurance scheme for older people starts at age 65, and those who are younger than this, or who have younger spouses, have a strong incentive to continue working in order to secure continued health insurance cover [109] [54] [84]. In some cases redundancy means that savings that had been intended for support in retirement are used up, so that people have to work for longer than they originally intended [20]. Smeaton and McKay [98] also found that people who still have mortgages on their homes are more likely to continue working than those who have paid off their mortgages and tenants.

What role does mandatory retirement play in the decision to retire?

The existence of the right on the part of an employer to insist that workers retire at a particular age does not in itself mean that the power is effective. In other words, the power may exist, but the reality is that people are retiring when they wish to do so rather than being forced by their employers to retire earlier than they would have wished. Many people retire before they reach normal retirement age. Others retire willingly at normal retirement age. Some employers are willing to continue to employ people beyond normal retirement age. All these considerations mean that mandatory retirement can be legally permitted but have little or no effect in practice. As Chapter 6 below shows, the abolition of

mandatory retirement in the US had little impact because in reality very few people who wanted to continue working were prevented from doing so by their employers.

Thus, the scale and nature of the practical effect of restricting the right to mandatory retirement depends crucially on the size and characteristics of the employees who would choose to continue working and who would not have been able to do so in the absence of the restriction. At present, we do not know what proportion of UK workers are both subject to mandatory retirement in their employment contracts, and when they reach that point would have preferred to continue working. We know that the timing of retirement is determined only by the fixed age in their job for around one in ten men and one in a 100 women [28] but not how many of this group would continue working if they could. Membership of an occupational pension scheme with a normal retirement age is not the same as being covered by mandatory retirement, if employers allow people to continue working beyond a fixed date. As Table 1 shows, more than a quarter of employees can choose to continue working beyond a fixed or minimum retirement age and a third have no fixed retirement date, and many of these are covered by occupational pension schemes. Most of the employers in the case studies reviewed in Chapter 4 have occupational pension schemes.

Evidence from other countries is also limited, but suggests that the numbers of people who both want to work and are forced into retirement by their employers on the grounds of age alone are both small and falling, given the strong trend towards early retirement [53]. In 1994 a quarter of men and seven out of ten women who had a fixed retirement age were expected to retire before the age of 65 (although some had the opportunity to continue working) [28]. British case study evidence shows that some employers have mandatory retirement ages which are below 65, so some of the retirement that takes place below this age is likely to be both involuntary and not associated with redundancy, but it is not clear how significant an issue it is [35] [111].

One important piece of indirect evidence is that only a minority of British employees are still working by their normal retirement date. Thus, for this group the rules on mandatory retirement are unlikely to have any impact on their behaviour. They have either already retired voluntarily, or they have been made redundant in circumstances where staff numbers overall are being reduced. One study found that 95 per cent of those retiring from 22 occupational pension schemes were aged less than 65, and two-thirds were under 60 [55]. A study of the BBC in the early 1990s found that only two per cent of those leaving the organisation did so because they had reached normal retirement age [88].
We have evidence from the Retirement Survey that around one in ten occupational pension scheme members who retire do so because they

reach the age laid down by the scheme and no other reason [103]. However, given that most occupational pension schemes do not currently allow the accrual of additional benefits after normal retirement age, it is generally financially disadvantageous to continue working beyond this point, because the foregone immediate pension is not offset by enhancements to a pension which is drawn later [99]. Thus, even if their employers were to permit them to continue in their employment it is unlikely that many of this group would actually choose to continue working in the absence of a restructuring of their pension scheme. Given the financial costs involved, it is likely that only a minority, especially those with relatively short service and therefore with a smaller loss in terms of pension income foregone, would want to remain in their jobs. Among those who are not members of occupational pension schemes only five per cent of male retirements are of people who have reached the normal retirement age in their job and are retiring for that reason alone [103]. Moreover, the earlier the normal retirement age in a particular pension scheme, the more likely it is that someone would have preferred to continue working. Thus, someone retiring at 60 is more likely to be a reluctant retiree than someone retiring at 65 is.

Since the 1994 Retirement Survey, there have been increases in the normal retirement ages in many occupational pension schemes, particularly for women, following several sex discrimination cases which found that having different retirement ages for men and women could be discriminatory. The majority of schemes that had previously had different normal retirement ages for men and women have therefore introduced common retirement ages. The cost in terms of contribution rates of equalisation at 60 would have been prohibitively high, and in the light of the raising of women's state pension age to 65 for those retiring in the future, most schemes have adopted equalisation at age 65.

Thus, although 60 is the normal retirement age for men in more than half of all occupational pension schemes and for women in two-thirds, these schemes are likely to be either small with fewer than 20 members, or closed to new members. Larger and active schemes are more likely to have a retirement age of 65 for both men and women. Thus, two-thirds of both male and female current pension scheme members have a retirement date of 65. A small proportion (two per cent) of schemes have a retirement age below 60 [99]. As well as the issue of sex discrimination, occupational pension funds, especially for defined benefit schemes, have recently come under financial pressure as surpluses have disappeared and investment performance has deteriorated.

Pension schemes in the UK are free to set their own normal retirement ages. However, they do have to comply with Inland Revenue rules about the minimum retirement age for the scheme in order for contributions to qualify for tax relief. While there is an actuarial justification for a normal

retirement age in defined benefit schemes, this is not the case with defined contribution schemes, which are actuarially neutral. The trend towards replacing defined benefit schemes with defined contribution schemes will make it more difficult in future for pension schemes to justify their normal retirement ages on objective grounds.

However, more generally, the relationship between pension arrangements and age discrimination is complex, in that defined benefit schemes are intrinsically discriminatory between people of different ages. The benefit entitlement derived from a £1 contribution by a younger person is less than the benefit entitlement derived from a £1 contribution by an older person, because the schemes average out the contribution rates over a working lifetime in order to produce a given pension entitlement. They are based on the assumption that everyone will be a loser while young and a gainer when older. Thus although they treat young people unfairly, the gains and losses will even out over their working lifetimes. Defined contribution schemes, on the other hand are based on each £1 worth of contributions getting an appropriate actuarial return. The pension payable is based on both the level of contributions and on the level of dividends and capital gains that have been reinvested in the fund. For this reason, a more recent contribution buys less than one that was made longer ago.

In other countries pension schemes do not always enjoy the freedom that British pension schemes have to set their own retirement ages. For example in Norway the minimum normal retirement age at which occupational pensions can be paid is 67 (although the reality in Norway, as in other countries, is that most people retire before reaching this point even if they do not immediately draw their occupational pension). Although this is combined with a prohibition on mandatory retirement before the age of 70 for most employees, the reality is that only a minority are working at age 67, and very few at 70 [105] [108].

The upward shift in the normal retirement ages in occupational pension schemes that has taken place in recent years also has implications for the mandatory retirement debate. Given that the evidence is that those retiring at 60 are more likely to want to continue working than those who retire at 65, the move towards a normal retirement age of 65 for those who are currently employed is likely to mean a smaller proportion of retirees are reluctant than for the current generation of pensioners who were more likely to have had a retirement age of 60.

The evidence of the scale of those retired involuntarily on age grounds alone is inevitably circumstantial and partial. However, it is consistent with no more than five per cent of those reaching normal retirement age in their jobs preferring to continue working. These reluctant retirees are more commonly found among those who retire at 60 than among those retiring at 65. Most retirements are either wholly voluntary, or are in

response to the financial incentives offered by their occupational pension scheme. In the US, the 1986 amendment to the age discrimination legislation made it obligatory for pension schemes to offer continued accrual of benefits after normal retirement age, although not necessarily at the same rate as before. This provision was introduced precisely because the financial costs of choosing to continue to work were so large that few of those eligible for occupational pensions were choosing to do so. The move away from defined benefit towards defined contribution pension schemes is, however, likely to have an effect here, since the pensions from defined contribution schemes are determined only by the size of an individual's own pension assets based on their individual contributions and those made on their behalf by their employer. The benefits are not affected by the time period over which those assets have accumulated except to the extent that reinvested dividends and capital gains enhance the overall value of the fund. However, in many cases, the shift to defined contribution schemes is for new members only and most of those retiring with occupational pensions over the next 20 years will still be members of defined benefit schemes. They might want to follow the American pattern and move to another job, but not many are likely to want to remain with their career employer.

Key issues from Chapter 5

- The move towards early retirement has come about because of the desirability of leisure, a desire on the part of employees not to continue to do boring or stressful jobs and workplace restructuring leading to redundancy. The first two at least are likely to continue to be important in encouraging people to retire rather than continue working.
- Those who stop working for a particular employer and draw a pension may not actually be retiring, but may continue working in another job. This is the most common pattern in the United States.
- Those who choose to postpone retirement and continue working beyond normal retirement age are drawn from three differing groups:
    - women who are postponing retirement beyond the age of 60 but before the age of 66;
    - the self-employed, those with high levels of education and those with intrinsically satisfying jobs, who want to work for as long as it remains interesting and satisfying;
    - those with low levels of income who work mainly for financial reasons.
- Three-quarters of those working beyond state pension age are continuing in the same job that they had before.

- Those continuing to work beyond state pension age have high levels of job satisfaction and good health.
- Involuntary retirement at normal retirement age is not common and is more likely to be found in those who are obliged to retire before the age of 65.

6

Experience of limiting or abolishing mandatory retirement in other countries

In the United States at a federal level mandatory retirement was restricted to people over 65 in 1967. This was raised to 70 in 1978 and (with a few exceptions mainly on public safety grounds) was abolished altogether in 1986. However, several individual states abolished it earlier than this. Thus, there are four possible sources of American evidence about the effect of limiting or abolishing mandatory retirement:

- information about the effect of the initial prohibition of mandatory retirement for people under 65
- information about the effect of the raising of the federal minimum mandatory retirement age from 65 to 70
- information comparing states with mandatory retirement with those without
- information about the effect of abolishing mandatory retirement.

Each of these sources is likely to cast some light on the kind of issues that UK companies are likely to confront if they had to make changes to their mandatory retirement arrangements. Essentially, the position in the EU is now similar to that of the United States before 1967.

In Australia, although mandatory retirement was restricted in 1996 and abolished altogether in 1999, social and employer attitudes remain strongly against working beyond state pension age, which puts social pressure on people to retire. The experience so far in Australia is that this part of the age discrimination legislation has not had any discernible impact either on retirement behaviour generally or in particular workplaces [13].

In Norway, mandatory retirement is prohibited before the age of 70, although in reality many Norwegians retire early under the provisions of a collective early retirement scheme that provides support for people until they are eligible to draw their occupational and state pensions at the age of 67. Around 60 per cent of the Norwegian workforce is eligible for the scheme, and 80 per cent of those who are eligible retire under it [108] [115]. There are widespread reports of Norwegian employers actively encouraging people to retire early [115] [93] and the consensus in Norway is that the restrictions on mandatory retirement do not actually influence anyone's behaviour.

In Canada, mandatory retirement is generally prohibited before the age of 65, and in some provinces has been abolished altogether. A recent investigation by the Ontario Human Rights Commission found that, as in Australia, public tolerance towards age discrimination was high generally, and was particularly high towards the idea that employers should be permitted to make people retire [82]. Thus, although the Canadian Supreme Court has ruled that mandatory retirement is discriminatory, it has also allowed it to continue on social policy grounds, and this position is widely supported by public opinion [53].

There are elements of the debate about mandatory retirement in Canada, which might help to clarify some of the current considerations in Europe. In particular, the Canadian discussion generally draws a distinction between the issue of unilateral mandatory retirement at the sole behest of the employer, which is permissible at age 65 or later under current legislation in most provinces, and contractual mandatory retirement, where a fixed retirement age is an explicit part of the employment contract and to which the employee has given his or her explicit agreement. Thus, whereas unilateral mandatory retirement could be seen as disadvantageous to employees, contractual mandatory retirement could be regarded as part of a wider employment package of rights, responsibilities and benefits, particularly where there is an occupational pension scheme. Disrupting one element of this to benefit one party alone could have consequences for other elements in the package, since employers might feel the need to redress the balance.

Many Canadians believe that employers and employees should be free to agree a mandatory retirement clause in an employment contract, and restrictions on what can be agreed should only be imposed on wider public interest grounds. Traditionally UK employment law has followed a similar approach, with little restriction on what may be agreed, in contrast to labour law in many other European countries where employment contracts may contain only what is explicitly permitted (see [102]). The Canadian debate centres around whether allowing the inclusion of a mandatory retirement clause in an employment contract is akin to allowing someone to work for less than the minimum wage or to enter

into indentured employment: terms and conditions that are prohibited on public policy grounds even where both parties are willing. The alternative position is that a contract with a mandatory retirement clause is more like a fixed-term contract, which both parties can enter into freely. Thus, while acknowledging that mandatory retirement is discriminatory, the debate focuses both on which public interest it is serving and on whether this is an appropriate area for the state to interfere in the terms of a contract [53].

How many people did mandatory retirement affect in the USA?

Even in the 1960s, before the federal legislation prohibiting mandatory retirement before the age of 65, only around half the US workforce had contracts with mandatory retirement clauses. This is currently the proportion of workers subject to mandatory retirement in Canada [53], and, as discussed in Chapter 1, appears to be similar to the proportion of people in the UK whose employers can determine the timing of their retirement.

Moreover, in the US, the majority of those working in jobs with mandatory retirement left them before they reached retirement age, and nearly half the remainder were happy to retire at that point [62]. Thus, before mandatory retirement was restricted to those over 65, only around ten per cent of the American workforce was actually affected by mandatory retirement in that they had a contract with a mandatory retirement clause and this had made them retire before they would otherwise have wished to do so. Moreover, around half of those who retired unwillingly before the 1967 Age Discrimination in Employment Act were not physically capable of continuing to work. Thus, the proportion of the workforce whose choices were actually restricted by mandatory retirement was only around five per cent before any legal restrictions were imposed [62].

In the US in the 1970s, following the introduction of the minimum mandatory retirement age of 65, the proportion of the age cohort who reached the age of 65 and retired unwillingly (including those who were not fit enough to work) had fallen to a maximum of around five per cent [94]. Sum and Fogg [101] estimate that in fact only two per cent of older Americans who were not working between 1972 and 1986 would have preferred to have a job. This, too, is consistent with the British evidence that those who are reluctant to retire tend to be under 65, and a much lower proportion of those retiring at 65 would prefer to continue working.

One of the first US studies of the initial effects of limiting mandatory retirement to those aged 65 or over was by Burkhauser and Quinn [16].

This estimated that the effect had been to increase the economic activity rate of 64 and 65 year olds from 38 per cent to 40 per cent. Another study covering this initial period (in this case 1966 to 1980) is that by Johnson and Neumark [57]. During most of the period under study, the federal minimum mandatory retirement age was 65, with the increase to 70 taking place towards the end of the period. However, over this period, some individual states either had or introduced a prohibition on mandatory retirement. Therefore, the study covers people whose contracts had a mandatory retirement clause (around half of the total), those whose employers had voluntarily chosen not to have a mandatory retirement clause, and those who lived in states where mandatory retirement was forbidden. It found that those with mandatory retirement contracts were between 1.3 times and twice as likely to leave their jobs between the ages of 60 and 65 than those without mandatory retirement, after taking account of other factors such as job satisfaction and health status.

By 1986, when the mandatory retirement age limit of 70 was removed, no more than one-two per cent of Americans reaching the age of 70 would have preferred to continue working [62] [94]. One estimate suggests that only one in 160 of those over 70 in 1986 would have preferred to be working. Thus, by the time it was abolished in 1986, mandatory retirement was legal but did not actually make much difference to behaviour or outcomes. Those affected were mainly incumbent white collar and high status blue-collar workers in jobs that were physically undemanding. The reality is that the restriction and then the abolition of mandatory retirement in the US took place in a context where employees were choosing to retire earlier in any case. It is possible to estimate the effect of mandatory retirement on the length of the working lives of the individuals affected, but those who were actually affected were relatively few in number.

This point of view is supported by the evidence of Peracchi and Welch [87] who showed that when the minimum mandatory retirement age of 65 was first introduced in the late 1960s the pattern of retirement ages in the US showed spikes at 61, 64 and 67 for both men and women. By the 1980s the age 64 spike was still there but had become smaller, the age 61 spike had grown, and the age 67 spike had disappeared. In other words, as the mandatory retirement age increased, the proportion of people retiring before the age of 65 also increased.

Not surprisingly, therefore, there was a widespread perception in the US in the years after 1978, that the legislation on age discrimination did not appear to have been having much effect, and that retaining mandatory retirement for those aged 70 was restricting the proportion of older Americans with jobs. However, Burkhauser and Quinn [14] argue that this was based on a misconception, and that at least half of the pre-1986

labour force withdrawals that seemed to be based on mandatory retirement ages were in fact based on financial incentives. Since the incentive structure confronting older workers did not change after the abolition of mandatory retirement, it is not surprising that the impact on retirement choices of moving from an age limit of 70 to no age limit was actually minimal.

Impact on promotion of younger workers in the USA

The age discrimination legislation in the US, as the Canadian and Australian debates have shown, was not universally popular. One of the sources of concern was a fear on the part of younger workers that their promotion prospects would be adversely affected by older workers remaining in post for longer. Some studies have looked at this issue. Levine [62] argued that the available evidence suggested that the raising of the minimum mandatory retirement age from 65 to 70 in 1978 had a negligible effect on the promotion rate of younger workers, and he could find no evidence that the subsequent abolition in 1986 changed promotion practices.

This is not surprising in the light of the evidence reviewed in the section above that the number of people who might have chosen to retire when given the opportunity to do so amounted to no more than one-two per cent of the age group. Moreover, many of those will not have been working in jobs into which younger people are promoted, and those who remained at work generally only stayed for an additional year or two. Thus, it would be unlikely for any individual workplace, to have to accommodate more than one or two workers staying on for longer than they otherwise would. Only very large workplace employing several thousand people would be likely to have more than this, and they would be more readily able to accommodate the kind of small fluctuations in promotion flows that would probably be smaller than those that they normally had to deal with. A further relevant issue here is the extent to which jobs that are more senior are more stressful and demand longer hours. Both these job characteristics are associated with a relatively low tendency to continue working beyond normal retirement age [54].

The main exception to the evidence that the effect on organisations is small and readily accommodated is in American universities. While the federal mandatory retirement age was raised to 70 in 1978, it remained at 65 for university academic staff until 1982, although only around a third of professors reaching the age of 65 faced mandatory retirement. The others were covered by state law or by voluntary contracts which either included a higher age or which prohibited mandatory retirement altogether [62]. When mandatory retirement was generally abolished in 1986, it was retained for a small number of occupations, including police and fire officers and tenured university faculty. Universities retained the right to

retire tenured faculty members at the age of 70, although not all of them took advantage of the exemption, and some universities were prevented from requiring faculty members to retire by state law. This restriction in the case of university faculty was eventually lifted in 1994.

A general study, reviewing the evidence before the exemption was lifted [47] found that almost all faculty members retired at that time between the ages of 65 and 70. One of the reasons that had prompted the research was a concern that talented young people, particularly scientists, but including those in other fields too, would be lost to academic life because there would be no openings for them. When the retirement age for academic staff was increased from 65 to 70 in 1982, around 40 per cent of university academic staff chose to continue working beyond the age of 65. However, even in universities and states that abolished mandatory retirement altogether, most of them were retired by the age of 70. In universities without mandatory retirement one and half per cent or less of faculty members were over 70, and almost all had retired by the age of 73. The study concluded that few faculty members would want to work beyond the age of 70 even if the opportunity were opened to them. It also concluded that the issue of the potential blockage of opportunities was manageable.

Another study of law faculty members [23] took place between the raising of the age to 70 and the abolition of mandatory retirement in 1994, although the plan to abolish it was known. This found that 84 per cent of respondents intended to retire at 70 or earlier and the remainder intended to retire at an age between 71 and 88. Of the whole sample, 15 per cent thought a change in mandatory retirement might influence their decision. Thus, they concluded that potentially the removal of mandatory retirement for academic lawyers could lead to a doubling of those staying beyond the age of 70.

This conclusion was borne out by a more recent study [3] which has looked at the actual effect of abolishing mandatory retirement on the retirement patterns of faculty members across all subject areas in a large sample of universities. They found that prior to 1994 there were large retirement spikes at the ages of 70 and 71, whereas after 1994 retirement rates at 70 and 71 were similar to those for people aged 69. Before 1994, nine out of ten professors working at age 70 had retired within two years, whereas after 1994 half were still teaching two years later. They predict a significant rise in the proportion of faculty members over the age of 70 over coming years.

In fact, university faculty embody many of the key features which are known to be associated with late retirement: a high level of education, a high level of intrinsic job satisfaction, a large degree of autonomy, a high level of flexibility around hours and effort, and moderate levels of stress

and challenge. Moreover, the system of tenure, designed to protect academic freedom, means that dismissal is virtually impossible except for gross misconduct. This means that academics do not have to prove their continued competence and unlike those in other sectors of the economy, are immune from restructuring plans. The pension scheme to which most American university professors belong is also a defined contribution scheme, so that continuing to work increases their future pension entitlement in an actuarially neutral way. It is, therefore, not surprising that many have chosen to work beyond the age of 70, and that this is the sector where the greatest potential problems lie in terms of promotion blockages and restrictions on universities' ability to switch resources from one area of study to another.

Since universities have a certain amount of flexibility over the ratio of senior professors to more junior faculty members, they have generally regarded the promotion blockage issue as soluble. However, the switch of resources issue is more problematic. For example, a university might want to expand the number of places for students to study electronic engineering, but is unable to create the student places because its staffing budgets are tied up in employing elderly law or classics professors. The retirement of a law professor would not create a vacancy for a younger person to become a law professor. Rather, it would probably create two junior faculty posts in engineering. In other sectors people employed in senior positions by the same organisation tend to have a large amount of common skills and knowledge, so that deployment between one job and another is quite reasonable. In universities, this is not true, and the ability to expand or contract particular fields of study is driven by retirement and non-replacement. The existence of tenure in the United States means that professors cannot be made redundant even if a university wants to withdraw from a subject area altogether. In Britain, university academic staff can be dismissed on the grounds of redundancy in the same way as those in other jobs. The abolition of mandatory retirement does appear to have created problems for some American universities, and may continue to do so in future, but this seems to have come about because of the unusual combination of circumstances that lay behind the original exemption.

Impact on overall employment levels

In terms of outcomes, the first thing to note is that the US is the only advanced country where the trend towards earlier retirement has both been stabilised and then markedly reversed. There was an improvement in the UK following the 1989 abolition of the earnings rule, which allowed people to work and draw their full state pension, but the increase in participation was relatively small. In the 1940s and 1950s, the age at which around half the American population was retired and half was working was around 70. By the mid 1980s, this had fallen to around 62

even though working hours had fallen, work had become generally lighter and health had improved. [84] [14].

8. Proportion of economically active men by age: United States

Age	1985	1996
65	30.5	33.4
66	26.5	31.7
67	23.7	26.5
68	20.5	22.7
69	19.5	22.2
70	15.9	21.3
72	14.9	16.3

Source: Burkhauser and Quinn (1997)

If previous participation trends had continued in the US, the 1996 participation rates for men aged 60-64 would have been 40 per cent, while it was in fact 54 per cent. This meant that an extra 600,000 60-64 year old men were working in 1996. For men aged 65-69, the participation rate was 24 per cent in 1986, and if previous trends had continued it would have reached 12 per cent ten years later. In fact, the participation rate in 1996 at 27 per cent was higher than it had been in 1986. This amounts to an additional 700,000 men in the labour market. For women the participation rate for those aged 60-64 in 1986 was 33 per cent. A continuation of past trends would have resulted in a small fall to 32 per cent, but in fact, there was an increase and the participation rate in 1996 was 38 per cent, or an additional 324,000 workers. Some of this change came about because of an improvement in the macroeconomic environment, but the main change has been in the willingness of older people to work, and the willingness of employers to retain, and hire them.

Some of the most influential researchers in the field have concluded that the main cause of the increase in the proportion of older people who are working is the prohibition of discrimination against older people rather than the restrictions on mandatory retirement [14] [76]. Others have concluded that the evidence suggests that the effect has mainly been on the increased retention of incumbent workers rather than via any increase in the recruitment rate of older people [105] [53]. However, this increased retention has not been of people who might otherwise have been affected by mandatory retirement. Rather, it is of those who might otherwise have been unfairly selected for redundancy in their late 50s or early 60s. It is important to remember that even now, most American men have already retired before the age of 65, and most American women have retired before the age of 60. Incumbent workers have benefited from the age discrimination legislation not because they have been able to stay in employment beyond what had previously been mandatory retirement age, but because it became unlawful to select

people for redundancy or layoff on the grounds of age — a practice that had previously been common. Thus, the relative risks confronting employed older workers were reduced, while those confronting younger workers were increased.

Financial incentives

Typically, workers who are choosing whether to continue working or to retire from a particular job and draw their pension are not confronted with a choice between a pension and no pension, but between a lower pension available immediately but reduced for the rest of their lifetime and no pension immediately but a higher one in the future. The reality that most Americans have been faced with up until now has been a choice which is not actuarially equivalent between the two options. The rewards to deferment offered by most defined benefit occupational pension schemes have tended to be less than actuarially fair (although, as already discussed, the differential accrual rates facing older and younger workers are also arguably unfair in a different way).

The result has been that maximum retirement benefits have tended to be available before the normal retirement age, typically at around the age of 62. This has encouraged workers to leave their career jobs with larger employers at around this point [94] [14] [54] [33] [18]. In addition, more recently, employers have developed 'early out' bonuses whereby employees choosing to retire at particular ages receive a lump sum in addition to any pension entitlement [78].

The widespread availability of full occupational pensions before normal retirement age is the outcome of many years campaigning by American trade unions for 'thirty and out' — a full pension after 30 years of service. As well as the reward for long service element in this idea, the underlying rationale was also the idea that older workers were keeping younger workers out of jobs and preventing their career progression. Thus 'thirty and out' was thought to serve the interests of both older and younger workers [74].[4] Hurd and McGarry [54] estimate that the availability of full defined benefit pension scheme benefits before the age of 62 reduces the actual age of retirement from paid work by one and half years, compared with their being available at 62. Similarly the availability of full pension benefits only after the age of 62 results in retirement taking place around one and half years later than when benefits are available at age 62. Defined contribution schemes, which are generally actuarially neutral, had a much smaller effect. The shift, which is taking place in the US, as in Britain, away from defined benefit towards defined contribution pension

[4] This belief is an example of what is known as the lump of labour fallacy, which is discussed in Chapter 7 below.

schemes, will reduce US employers' ability to skew the incentive structure in favour of early retirement [14] [17].

It is inherent in the nature of defined benefit pension schemes that they do not relate benefits to contributions in an actuarially fair way for individuals. They balance contributions and liabilities over the scheme as a whole, but in essence, they involve subsidies from younger to older workers, and from lower earners to higher earners. For those who are on a rising earnings profile, the contributions that older workers make to schemes do not cover the additional pension entitlement that their additional years of service would entitle them to. Because employers have an obligation to balance the assets and liabilities of the scheme overall, the implicit cost to them of older workers is very high, particularly if the workers concerned are well paid. Thus, the issue of the appropriate actuarial benefit to an individual employee from deferment needs to be considered in the wider context of the actuarial fairness of the scheme overall. Since older workers are already getting an actuarial subsidy, a 'fair' accrual rate for deferrals based on the reduction in the number of years over which the pension would be drawn, would actually make a scheme even more actuarially unfair to employers and younger employees. Apart from requiring some accrual of pension rights for additional years of work, US legislation is not prescriptive about the way in which pension scheme rules should operate. By contrast, the European Directive will require employers' pension provision to operate fairly. Thus, UK employers will not be able to influence employees' retirement decisions by manipulating accrual rates.

In the US the incentive offered by occupational pension schemes has been reinforced until recently by the rules for social security state retirement pensions, where drawing a reduced pension at 62 has been more attractive than a full pension at 65 because the deduction for early drawing was less than an actuarially fair one. New arrangements for social security pensions give greater enhancements for deferral and larger reductions for early drawing. For people born after 1940 the normal retirement age has been raised to 67, and the discount for drawing social security at the age of 62 will increase from 20 per cent to 30 per cent. This move is not entirely uncontroversial, since it has a greater proportionate impact on the lifetime incomes of those who have the

shortest life expectancy — those in poor health and African Americans in particular. It is therefore essentially a transfer from poorer, older people to better off taxpayers [113] [94].

The state pension lessons from US experience are less likely to be relevant in the UK context, however, because UK state pensions cannot be drawn early. In addition, unlike in the US and most other countries, state pensions have not been reduced to take account of any earnings from employment since 1989. This means that there are already stronger incentives in Britain than in most other countries for people to continue working after they have become eligible for their state pensions. In the year after the abolition of the earnings rule, the economic activity rate of men over 65 rose by two percentage points [106]. However, other research which attempts to separate out the different influences at the time, suggests that the change in the incentive structure did not affect men's participation rates, but did lead to an increase in hours among those who were already working. There was a small increase in women's participation, but it was not statistically significant. Older women already working increased their hours somewhat [30].

Terms and conditions

In addition to their ability to skew incentives via the operation of their pension schemes, American employers can also influence workers' decisions by means of the terms on which they are willing to employ people. For example, many older workers would prefer to work reduced hours, but employers are not obliged to offer them the opportunity to do so. Indeed, they can legitimately encourage them to quit by only offering full-time work or not offering the opportunity to move to less strenuous or stressful tasks. Quinn and Burkhauser [90] found that around a million employed older Americans expected to have to retire earlier than they wanted to because their employers would not offer them the kind of flexibility they wanted. The European legislation (which covers all ages, not just older workers) will prohibit employers offering older workers different terms and conditions from those available to younger workers, because this would discriminate against younger workers. Thus the US evidence that requiring older workers to comply with the same terms and conditions as younger workers tends to reduce the extent to which people want to carry on working is potentially relevant.

The factors in terms and conditions which are associated with early retirement tend to be the converse of those associated with working beyond normal retirement age. Thus, workers postpone retirement if the job is pleasant or if there is flexibility around the hours or effort. Hurd and McGarry [54] also found that at each successive age a lower proportion of those who were in work were in physically demanding jobs. Although some of those who had been doing physically demanding jobs

will have moved into other, less taxing, types of work, they found some evidence that workers in physically demanding jobs were more likely than other groups to retire at the earliest age (then 62) at which they were eligible to draw a (reduced) social security pension.

One of the key terms and conditions which safeguard the interests of American employers is their ability to dismiss employees on the grounds of performance. Since the introduction of age discrimination legislation, many US employers have introduced regular performance testing for all workers [18]. It is likely that this has added to business costs, although there may have been some offsetting benefits in the form of improved productivity across the whole workforce.

Key issues from Chapter 6

- The evidence suggests that the abolition of mandatory retirement has had a limited impact on the employment of older people in the United States, although the prohibition of age discrimination has had an impact.
- Employers have offered financial incentives, particularly by skewing pension benefits, to encourage employees to leave.
- Employers not wishing to employ older people can also refuse to allow any flexibility on job demands or hours, and this encourages some people to leave.
- Employers have also introduced new systems of performance monitoring to ensure that they are in a position legally to dismiss the least productive employees.

7

Macroeconomic evidence

The macroeconomic evidence reviewed here generally relates to the effect of increasing the overall effective age of retirement and of increasing the participation rate of older workers. To the extent that mandatory retirement has a macroeconomic effect, it will be through the effect it could have on overall retirement ages and participation rates. The scale of the impact will depend on savings and investment behaviour, government action to control age-related public expenditure, the implications of any investment changes for overall productivity, and adjustments brought about by changes in tax rates, wages, exchange rates, international trade and capital flows. The uncertainties attached to all of these things mean that any macroeconomic estimates have to be tentative.

There are four potential types of macroeconomic effect:

- the effect on overall employment and unemployment rates
- the effect on savings and investment in the economy
- the effect on government fiscal balances

There are also the possible affects on the overall productive potential of the economy, which were discussed in Chapter 3.

Overall employment rate

There is a widespread belief that the economy only has a limited number of jobs, and if older workers remain in the labour market, they will deny job opportunities to younger people. Indeed, it was this belief that led most governments to develop and encourage early retirement during the 1980s and 1990s as a response to unemployment. The idea was that by retiring older people jobs would be freed up for younger people.

The reality is, as the Cabinet Office report *Winning the Generation Game* [17] pointed out, that the evidence does not support this view, which is why it is known as 'the lump of labour fallacy'. The adjustment processes in the economy, particularly the adjustment of wages and

interest rates, operate to take account of the available supply of labour, and also respond to the changes in income which come about as people move into and out of employment. On the whole, countries with large and growing labour forces are able to generate higher rates of growth in employment than those with small and shrinking ones. Over the last 20 years, the economies with the highest early retirement rates had the lowest rates of growth in employment, and young people in countries with lower early retirement rates have done no worse than young people in countries where older people were supposedly making way for them.

The United States in particular has managed to increase jobs for both older and younger workers simultaneously [63] [17] [80]. There has been no correlation between state unemployment rates and the participation rates of people over 65 [33]. By contrast, the fall in the participation rate of older men in Britain over the past 20 years has resulted in 800,000 fewer people being in employment, with consequential effects on overall productive potential, tax receipts and benefit payments [17].

However, in order to measure macroeconomic impacts, the question is how far the trend towards early retirement is reversible. One estimate is that raising the overall age at which people can draw their occupational pensions to 65 (which could be thought of as proxy for setting the minimum mandatory retirement age at 65) would reduce early retirement by occupational pension holders by around eight months on average, raising the effective retirement age from 62.6 to 63.3 [72].

In Norway, the state pension age is 67 and people are encouraged to be economically active up to the age of 70. Mandatory retirement is not allowed before the age of 70 and occupational pensions cannot be paid before the age of 67. Norway has succeeded by this combination of measures in keeping the labour force participation rate of men aged 60-66 up to around half. Very few Norwegians retire before the age of 60 [105].

At present, there are still disincentives to remain economically active, although there are fewer in the UK than in many other countries. Unless those disincentives are removed neither age discrimination legislation generally, nor restricting mandatory retirement in particular would have much of an effect on its own. The government is committed to reversing the trend towards early retirement as part of the EU Employment Strategy. This means that it is one of the policies that it can take into account in framing its age discrimination legislation. Unless the decline in the overall proportion of the population in employment is reversed, the annual rate of growth in living standards is likely to be halved from its

current one and half per cent a year [79]. However, to reverse the trend is likely to require a wider range of policy initiatives than those on age discrimination alone.

Effect on savings and investment

Studies of the effect on savings of a larger proportion of older people being employed and a lower proportion retired do not come out with clear-cut answers. This is largely because economists are not yet clear how far saving is determined by life cycle factors, and how far it is determined by the precautionary 'rainy day' principle. The impact on savings is important because pressure on government budgets from higher health and pensions expenditure will increase the need of governments to borrow. In addition, the volume of savings determines the level of funds available for investment in new capital stock. The dynamic adjustment processes in financial markets will determine how the process eventually translates into the impact on growth and prosperity for the population as a whole.

Savings behaviour is difficult to test empirically. Different data tend to give different results of the effect of ageing on saving. More recent evidence suggests that the precautionary buffer stock principle is more important in savings behaviour than had previously been thought, and that each percentage point rise in the ratio of inactive older people to the population as a whole reduces the savings rate by around 0.3 percentage points. Thus, the reverse of this would also be true: reducing the level of dependency among older people would have a positive effect on the overall savings rate. Therefore, if employment rates among older people were higher, this would mean that savings are likely to be higher because fewer people are running down their savings, and hence higher employment could lead to higher capital stock and faster growth rates [69] [79]. Smeaton and McKay [94] found that people in Britain working beyond state pension age were generally still saving.

Effect on public expenditure and fiscal balances

An ageing population tends to lead to an increase in expenditure on health and other forms of care. An increase in the retired population also leads to an increase in expenditure on benefits and a reduction in tax revenues. The latter can be offset to some extent by encouraging people to work for longer. In the UK, this does not reduce retirement pension expenditure, as this is paid regardless of work status, but it does reduce the likelihood that an older person will draw benefits under the minimum income guarantee. Already involuntary early retirement is damaging the UK public finances by increasing expenditure by £1-2 billion and reducing revenues by £2-3 billion [17].

A reduction of around eight per cent in the number of retired people would eliminate the impact of ageing on the debt/GDP ratio. This would imply raising the effective retirement age by around a year, or rather less if productivity performance could also be improved. In theory an increase in productivity performance of 0.5 percentage points a year would ease the public expenditure/GDP ratio in Britain by around 1¼ percentage points because pensions are linked to prices rather than earnings, but in reality it is likely that political pressure for higher pensions would mitigate this [79] [110] [77].

Key issues from Chapter 7

- There are likely to be positive macroeconomic effects from raising the employment rate of older people and reversing the trend towards early retirement. These effects include improvements in growth, living standards and public finances. The direction of the effect on savings and investment is not clear.
- However, the impact of restrictions on mandatory retirement on participation rates and therefore employment rates is likely to be small.

8

Conclusions

There are four main arguments that are generally deployed in support of employer discretion over the timing of employees' retirement. The first relates to occupational pension schemes. In the case of defined benefit (although not defined contribution) pension schemes, service towards the end of a working lifetime entails a transfer of assets from younger to older people, and from employers, who are responsible for the overall funding position, to older employees. This system is already under strain, as liabilities have been growing more quickly than assets in most schemes in recent years. Because the rate of return from additional years of service close to retirement is disproportionately high (and much higher than the rates in earlier years), allowing scheme members complete discretion over when to retire would imply a forced transfer from employers and other scheme members to older employees. Retirement at a fixed age, along with low accrual rates for those who leave before retirement, is, it is argued, one of the essential balancing features of defined benefit schemes.

In reality, however, it is not retirement that is essential in terms of balancing scheme assets and liabilities. It is limiting employees' ability to accrue additional entitlements. Retirement is the traditional means of doing this, but other approaches are possible, including age, salary or length of service caps. Without some limiting factor it becomes difficult, if not impossible, for the liabilities of pension schemes to be both predictable and manageable. Defined contribution schemes do not share these features, and an important feature of such schemes is that benefits are related strictly to contributions, so that whether or not someone continues to work has an actuarially neutral effect on their future pension entitlement.

The second reason for having a system of mandatory retirement relates to state pension age. The existence of the state pension reflects a social consensus that there is a point beyond which people should no longer be obliged to work. Retirement is seen as a reward. One of the key reasons why trade unions often support mandatory retirement is that they are concerned that employers can put pressure on people to continue working when they would really prefer to retire. State pension age still acts as an important signal. A third of men retire at 65 and a similar proportion of women retire at 60. Two-thirds of members of active occupational

pension schemes have a normal retirement age in the scheme of 65. However, since 1989, when the earnings rule was abolished, people drawing state pensions have been able to work without penalty, and around eight per cent of men and more than a quarter of women continue working beyond state pension age, typically for a year or two for men, and up to age 65 for women. Thus, the existence of state pension age does not in itself justify mandatory retirement at that age. In fact, a growing proportion of women have a retirement age in their jobs of 65, while the current generation of women are still able to draw their state pensions at 60 (although future generations will have to wait until they are 65). State pension age marks a demarcation point, in that society no longer expects or requires people to work beyond this point. However, it does not immediately follow that they should be prevented from doing so if they so choose.

The third argument relates to the macroeconomic issue about the distribution of jobs between those in different age groups, and to promotion opportunities and succession planning within the workplace. The macroeconomic argument is not supported by the evidence. It has long been established that although there may be a fixed number of jobs at any one point in time, this is dependent on a given set of skills, of investment levels, of wages and of prices. If more people are looking for jobs, wages tend to be moderated and more jobs tend to be created. The countries that encouraged people to retire early during the 1980s and 1990s have not had lower unemployment rates and higher employment rates among younger people than those that encouraged older people to remain at work. The economy with the largest job growth for young people — the USA — is the same one with the largest growth in employment among the over 65s. Countries that have absorbed large numbers of immigrants do not have higher unemployment rates than those that have not. If people are forced out of the labour force, their income levels fall and they demand fewer goods and services. In recognition of the policy errors of the past in this field, the latest version of the European Employment Strategy, agreed at the Lisbon summit in 2000, commits all EU Member States, including Britain to increasing the employment rate of older people.

Within individual workplaces, the number of people choosing to postpone their retirement is likely to remain small. Moreover, those who do stay beyond their normal retirement date tend to do so for only a few years. Employers already have to accommodate people leaving earlier than expected due to voluntary early retirement and resignation. A small number who remain longer should in most cases be able to be accommodated in the same way. There are some exceptions to this, however, and the experience of American universities is relevant here. The people who want to continue working rather than retire tend to be those who are well educated and who have intrinsically interesting jobs.

If these factors are combined with a high level of autonomy, particularly in terms of control over hours and effort, and with inherent difficulty in monitoring output, a particular workplace might find itself with a growing concentration of workers over 65. In American universities two factors have exacerbated the problem: academic tenure, which means that academic staff cannot be dismissed on the grounds of redundancy or restructuring, and a defined contribution pension scheme which allows members to continue to accrue pension benefits indefinitely. The situation in British universities is not the same as staff are in defined benefit pension schemes and tenure has been abolished. Nevertheless, if circumstances produce a concentration of older workers it can both limit promotion opportunities and make restructuring difficult to achieve.

The final reason why employers want to retain discretion over retirement is the issue of productivity and effectiveness. There is a widespread belief that older workers are less productive than younger ones, are less willing to train and act as a barrier to change. It also used to be thought that older workers in internal labour markets with seniority wage systems were paid wages that were higher than their contribution to output. However, research suggests that the wages of older workers are generally in line with their output, and that service with a particular employer does enhance performance. Moreover, a large amount of evidence suggests that productivity decline affects only a limited range of occupations — those requiring rapid reactions or physical strength. Most jobs can be done as effectively by a 70 year old as by a 35 year old, and most people in their 60s are more productive than those in their early 20s. Only a small proportion of older people experience a decline in work performance such that they no longer fall within the general range for other workers in the same kind of job. Older workers who have not had any training for some time may need different approaches from younger workers, but the evidence shows that they are able to learn and can reach the same standards.

Concern about the potential decline in productivity would probably result in tighter levels of performance monitoring of all employees by employers, which may lead to less relaxed relationships within the workplace. Introducing and operating such systems is also likely to add to business costs, although there is no evidence as to the likely scale of this. However, a greater emphasis on improved performance is also likely to lead to greater interest in job-related training both by older employees and by employers, which should have a positive impact on productivity and growth in the wider economy.

The limited macroeconomic evidence available suggests that by encouraging more older people to work rather than retire, restrictions on mandatory retirement are likely to have a small but positive effect on growth and output.

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