



WestminsterResearch

<http://www.wmin.ac.uk/westminsterresearch>

The impact of occupational pensions on retirement age.

Sepideh Arkani
Orla Gough

Westminster Business School

This paper has now been published in the Journal of Social Policy, 36 (2), (April 2007), pp. 297-318.

© Cambridge University Press [2005].

The Journal of Social Policy is available online at:

<http://uk.cambridge.org/journals/jsp>

The WestminsterResearch online digital archive at the University of Westminster aims to make the research output of the University available to a wider audience. Copyright and Moral Rights remain with the authors and/or copyright owners. Users are permitted to download and/or print one copy for non-commercial private study or research. Further distribution and any use of material from within this archive for profit-making enterprises or for commercial gain is strictly forbidden.

Whilst further distribution of specific materials from within this archive is forbidden, you may freely distribute the URL of WestminsterResearch.
(<http://www.wmin.ac.uk/westminsterresearch>).

In case of abuse or copyright appearing without permission e-mail watts@wmin.ac.uk.

The Impact of Occupational Pensions on Retirement Age

SEPIDEH ARKANI* and ORLA GOUGH**

**Department of Finance and Business Law, Westminster Business School, University of Westminster, 35 Marylebone Road, London NW1 5LS*

email: S.Arkani@westminster.ac.uk

***Chair of the Finance and Business Law Department, Westminster Business School, University of Westminster, 35 Marylebone Road, London, NW1 5LS*

email: gougho@wmin.ac.uk

Abstract

This article contributes to the debate about retirement age and the extent to which occupational pensions influence the decision to retire. It uses the waves of *Labour Force Survey* (1984–91) and *Quarterly Labour Force Survey* (1992–2003) to review the changes in the actual average retirement age in the UK during the period 1984–2003 by gender and ethnicity. The article investigates the link between occupational pension schemes and the actual retirement age of men and women. It explores the impact of pension type on employees' expected retirement age and the decision to take early retirement using the *English Longitudinal Survey of Ageing* (2002–03).

Introduction

Retirement age is the focus of attention in most European countries and constitutes the core of the government's pension reform in the UK. Increased life expectancy, low fertility rates and financial pressures on pension funds are among the factors that have shaped the government's philosophy of keeping people working. This philosophy, which underpins the government's social policy, has prompted them to attempt to increase the employment rate of those over 50. The planned introduction of legislation under the European Employment Directive prohibiting age discrimination in employment from October 2006 is intended to go some way to achieving this. Under this legislation, employers' mandatory retirement ages will be considered age discrimination unless they can be justified (DTI, 2005). The government hopes to defer the retirement ages of employees to increase their opportunity to save for their retirement (Pensions Commission, 2005). This article aims to contribute to the debate on retirement age by exploring the relation between occupational pensions and retirement age.

Retirement age is a complex subject due to its dependence on a variety of factors among which health, wealth, involuntary redundancy and lifestyle are the

most prominent. For instance, studies based on analyses of Retirement Surveys (1988–89 and 1994) have indicated ‘own ill health’ as a main reason for retirement by men in Britain in the period 1978–93 (Tanner, 1998) and by both sexes in the period 1988–1994 (Disney *et al.*, 1997). More recent research based on an analysis of the British Household Panel Survey (1991–98) supports this evidence by demonstrating a correlation between individuals’ health deterioration and the greater probability of their transition into economic inactivity in later working life (Disney *et al.*, 2004). Economic resources in terms of state and occupational pension income, savings and assets also have a direct bearing on whether and when individuals retire. Banks *et al.* (2002) have identified the existence of early retirement options in defined benefit (DB) pension schemes as an important determinant of retirement among scheme members and linked changes in retirement age to the adequacy of saving for retirement. Furthermore, the retirement choice has been related to work satisfaction of employees, on the one hand, and the discretion of managers and pension funds, or changes in the labour market, on the other (Guillemard, 1997; Hirsch, 2003; Vickerstaff *et al.*, 2004).

Retirement may therefore be planned through financial provisions such as pensions or imposed by unexpected events such as ill health or caring responsibilities. The planned retirement of employees with private pensions takes place within the framework of the retirement criteria set by the pension schemes with stipulated normal retirement ages. The social security system determines the age at which state pension can be drawn, and the welfare state policies dictate retirement timing of individuals who are dependent on welfare benefits for most of their retirement income (Williamson and McNamara, 2003). Although we acknowledge the significance of unexpected events on individuals’ decisions to retire, we are not concerned with them in this article. Rather we explore the potential influence of planned retirement provisions on the actual retirement age of employees with occupational pensions.

The current debate surrounding the extension of retirement age to beyond 65 and possibly 70 is dominated by two diverse arguments. On the one hand, the government claims that it wants to enable those who are willing and able to work longer, to do so to make better financial provisions for their retirement (DTI, 2003). On the other hand, there is opposition among working people, unions and other interest groups on the grounds that extension of retirement age forces poorer employees to work longer and shortens their retirement (Robinson *et al.*, 2005). The government’s case relates to retirement decisions that are imposed by employers through involuntarily redundancy or encouraged by them through the incentives of occupational pension schemes. It excludes retirement on grounds of health, wealth and lifestyle. In order to contribute to the debate on retirement age we need to explore the impact of occupational pensions on voluntary retirement decisions.

The literature on retirement age has tended to rely mainly on data from the Retirement Surveys 1988–89 and 1994; although more recently researchers have started drawing on the data from the *English Longitudinal Survey of Ageing* (ELSA) (Marmot *et al.*, 2002–03). The focus of the literature tends to be on the retirement behaviour of older people and analysis of their labour market participation (for example, Meghir and Whitehouse, 1994, 1997; Tanner, 1998). Some of the literature links the retirement decision, particularly early retirement, to private pension provision and their incentives using econometric models (for instance, Banks and Blundell, 2005; Blake, 2004; Blundell *et al.*, 2002). The problem with econometric models of older people's labour market participation, however, is their speculative nature that is based on simulation.

This article attempts to create a more realistic picture of retirement behaviour based on the actual retirement age of previous labour market participants. It uses data from the *Labour Force Surveys* (LFS) (1984–91) and *Quarterly Labour Force Surveys* (QLFS) (1992–2003) to evaluate the actual retirement age of participants who have left the labour market in the previous twelve months and their pension status, controlling for ethnicity. It then uses data from ELSA (Marmot *et al.*, 2002–03) to correlate retirement age to pension type. The article has three aims. First, it explores the changes in the average actual retirement age for males and females distinguishing between various ethnic groups. Second, it examines the changes to occupational pension scheme coverage, drawing correlations between pension status and retirement age. Third, the article investigates how retirement expectations and early retirement vary with pension type.

The article is structured in four sections. The first section covers the changes in the average actual retirement age in the UK over the period 1984–2003 by gender and ethnicity using LFSs and QLFSs. It updates previous estimates of retirement age, explores the differences between various ethnic groups and contains a review of literature. The second section reviews the changes to occupational pension scheme membership and establishes a correlation between pension status and retirement age using data from Government Actuary Department (GAD) surveys (2005, 2003, 2001, 1995) and QLFSs, respectively. The third section establishes correlations between pension type, expected retirement age and early retirement by gender using data from the first wave of ELSA. The fourth section concludes by discussing the findings and their implication for the future trend of retirement age.

Changes in average retirement age in the UK (1984–2003)

There has been much debate about the increasing trend among workers toward early retirement before the state pension age, in the period 1960s/1970s to 1990s (Blundell and Tanner, 1999; Cabinet Office, 2000; Blundell *et al.*, 2002; Meadows, 2003). More recently, the Pensions Commission, drawing upon OECD data, has

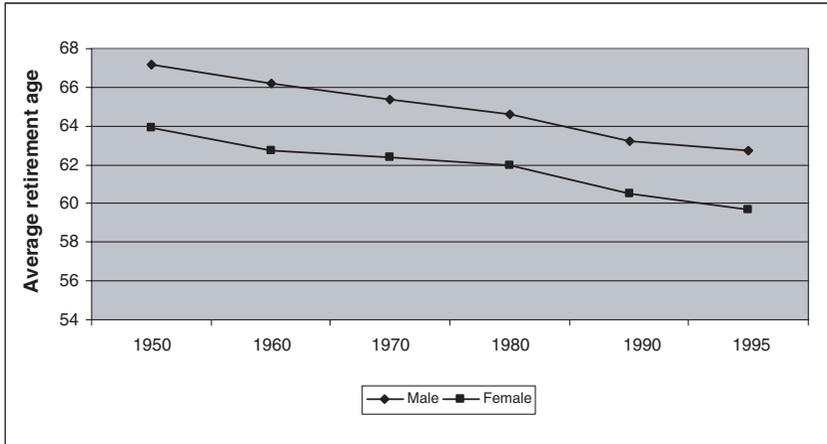


Figure 1. The average retirement age time series (1950–95)

Source: Blöndal and Scarpetta (1998).

indicated that this trend changed direction in 1995 and has been increasing since (2004: Figure 2.31). Academics and social policy makers, however, have hinted that the change in trend occurred in the late 1990s (Banks and Blundell, 2005; DWP, 2005). The early retirement argument is based mainly on labour market participation rates of older male workers in the 55–9 and 60–4 age groups, despite the differences observed in the labour market participation rates of women in the same age groups. The proponents of the view tend to build their case on two premises. One utilises employment survival probabilities using data from the Retirement Survey (Blundell and Tanner, 1999, Blundell *et al.*, 2002). The other uses estimates of average retirement ages calculated by Blöndal and Scarpetta in 1998 (Figure 1), which are in turn based on Kaplan-Meier estimators from *Labour Force Survey* data (Meadows, 2003; Pensions Commission, 2004).

There are two problems with the above approaches to estimating retirement age. First, retirement does not necessarily follow exit from the labour market (Gendell and Siegel, 1992). People may leave the labour market due to ill health and disability, voluntary or involuntary redundancy, which may lead to unemployment, or choice of lifestyle (Guillemard 1997; Gough, 2002; Disney *et al.*, 2004; Meadows, 2003). On the other hand, people who are incapacitated, economically inactive due to domestic or caring responsibilities, or long-term unemployed do retire, in the sense of becoming entitled to a state pension, upon reaching the state pension age (for example, Guillemard, 1997). Therefore, retirement is a transitional process that may involve employees aged 50 and over taking early retirement, reducing their workload and undertaking part-time work, or retiring at the normal retirement age. It may also be accompanied by work beyond the normal retirement age (Hirsch, 2003; Vickerstaff *et al.*,

2004). Secondly, probabilistic models are merely simulations of reality; they do not represent reality. In order to obtain a more accurate picture of the *actual* retirement ages in the UK, criteria are needed to define retirement and construct a method for measuring it. For this purpose the authors use datasets from the LFS and QLFS, which provide detailed information on individuals' labour market status during a specific reference period, from which data on retirement behaviour are derived. Due to the surveys' relatively large sample size of 60,000 households, they are considered better sources of data on smaller population sub-groups such as ethnic minorities compared with the General Household Survey, which covers 9000 households.

The criteria we use to define retirement within a particular year is withdrawal from the labour market within the preceding twelve months combined with retirement from economic activity. To compute the mean actual retirement age variable, we use both relational and logical operators to first calculate the actual retirement age in a particular year and then obtain the mean value for the resulting variable. We calculate the mean actual retirement age variable over two decades using datasets from LFS (1984–91) and QLFS (1992–2003). The 1984 survey is the earliest survey that uses similar variables with comparable values to those in the intervening period up to 2003. The 1985 survey contained errors in the data and therefore was excluded from the time series.

To compute the actual retirement age, we use the condition that the respondent's actual retirement age is equivalent to their current age if they left their last job within the last year and retired from economic activity. This is represented by the function: $retage = (age, leftlyr \& retired)$, where *retage* is the variable representing the age at which respondents actually retire; *age* is the variable representing the age of the respondents at the time of the survey; 'leftlyr' is the variable representing the respondents who left their last job within the last year of the survey; and *retired* is the variable representing economic inactivity due to retirement.¹

The variable *leftlyr* is computed using the function: $leftlyr = RANGE(\text{when left last job, lowest category, category corresponding to the respondent having left less than a year})$. This means that only those who left their last job between 'less than a month/three months ago' and 'six months but less than twelve months ago' will be given the value 1 for the new variable, *leftlyr*. The variable *retired* is computed using the condition: If ($economic\ activity = category\ retired$) $retired = 1$. This means that if the respondent left economic activity due to retirement, he/she is considered to have retired.²

Furthermore, in order to obtain more accurate calculations of the mean retirement age in the period 1992–2003, we compute the mean retirement age for the four quarters in one year and obtain the average as recommended by the *Labour Force Survey User Guide* (OPCS, 2003: 116). The computations of the actual retirement ages in the UK between 1984 and 2003 are presented in Figure 2.³

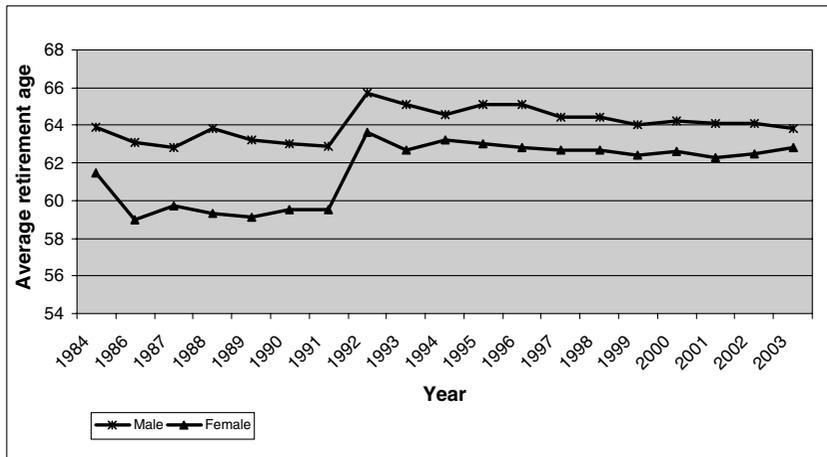


Figure 2. The mean actual retirement age time series (1984–2003)
 Source: *Labour Force Surveys* (1984–90) and *Quarterly Labour Force Surveys* (1992–2003).

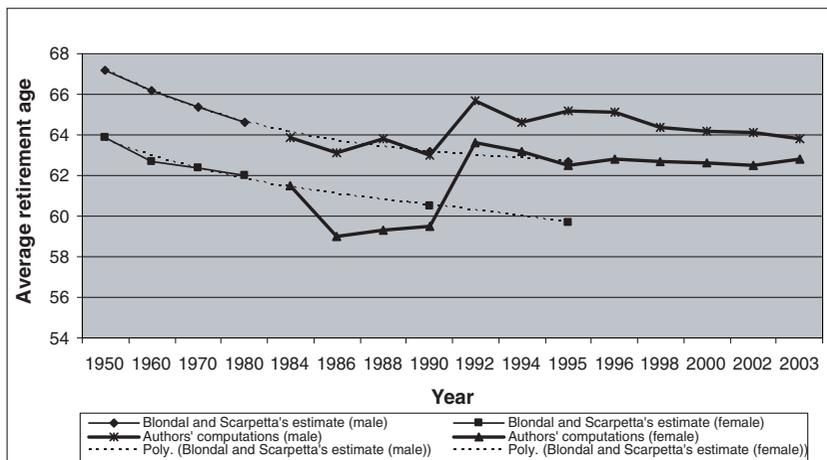


Figure 3. The average retirement age time series (1950–95) and the mean actual retirement age time series (1984–2003)
 Source: Blöndal and Scarpetta (1998); *Labour Force Surveys* (1984–1990); *Quarterly Labour Force Surveys* (1992–2003).

If we present Blöndal and Scarpetta’s (1998) estimates and our computations on the same graph (see Figure 3), we note that the trend of our computations of the mean actual retirement age for males follows that of Blöndal and Scarpetta’s from 1984 to 1990, but then reverses direction sharply in 1991, indicating a rise of 2.7 years by 1992. From this peak the trend gradually declines by 1.9 years in 2003, which is equivalent to the retirement age in 1988. The trend of the mean actual retirement age for females is somewhat different. It coincides with Blöndal and

TABLE 1. Active members of occupational pension schemes by normal retirement age (millions).

Normal pension age	1987	1991	1995	2000	2004
Under 60	0.0	0.0	0.0	0.0	0.0
60	2.0	2.1	1.9	1.6	1.96
Between 60 and 65	0.3	0.6	0.6	0.3	0.37
65	3.5	3.8	3.6	3.7	2.43
Over 65	0.0	0.0	0.0	0.0	0.0
Totals	5.8	6.5	6.2	5.7	4.76

Source: Occupational pension schemes 2000 – eleventh survey by the Government Actuary (2003), Occupational pension schemes 2004 – The twelfth survey by the Government Actuary (2005).

Scarpetta's in 1984, troughs in 1986 – deviating by about two years from Blöndal and Scarpetta's trend – and then rises sharply between 1991 and 1992 by 4.1 years, which is steeper compared with the trend of the mean actual retirement age for males. From this peak the trend gradually declines by 0.8 years in 2003 to the retirement age in 1960 indicating an upward inclination and the narrowing of the gap between female and male retirement ages.

The change in the retirement age trend of the 1990s and 2000s can be attributed to a number of factors. First, increased pressure on pension funds dissuaded firms from offering generous early retirement incentives to employees on defined benefit schemes (Banks and Blundell, 2005). Secondly, falling annuity rates and less generous income streams discouraged employees in defined contribution (DC) schemes to take early retirement (Banks and Blundell, 2005). Thirdly, the Normal Retirement Age (NRA) of private sector schemes rose between 1987 and 2000 (Table 1). This is reflected in the reduction of active members in private pension schemes with a NRA of 60 and the increase of active members in schemes with a NRA of between 60 and 65 and at 65.

Retirement age is influenced by endogenous and exogenous factors such as gender, ethnicity, qualifications, profession and sector. Due to the nature of our computations and their focus on previous labour market participants, the influence of profession and sector on retirement age cannot be evaluated. However, we will further analyse the changes in average retirement age for males and females in various ethnic groups to take account of this endogenous factor.

Variations of mean retirement age in various ethnic groups

The data provided by the LFSs 1984–91 from which the retirement age of various ethnic groups (both males and females) can be computed are incomplete and scant. In the main, significant observations about ethnic minority groups are only supplied from 1992 onwards and are better in terms of numbers for certain

TABLE 2. Number of observations of average retirement ages by ethnicity and gender.

Year	Black Caribbean	Indian	Pakistani	Bangladeshi	Chinese	African	Other
Men							
1984	432	865	433	0	0	0	0
1986	991	0	0	0	0	0	0
1987	750	408	391	0	0	0	0
1988	368	0	0	0	0	0	0
1989	263	0	0	0	0	0	0
1990	561	357	0	0	0	0	0
1991	366	693	0	0	0	0	0
1992	692	362	0	0	0	0	0
1993	4571	1672	0	420	0	524	1210
1994	1224	6317	0	0	0	0	4929
1995	1073	4432	0	0	0	0	460
1996	2504	4935	352	0	355	0	1110
1997	5370	1758	1134	0	365	0	1148
1998	4462	2514	971	0	3033	388	406
1999	2901	5731	1569	397	847	1312	1312
2000	6137	2573	2092	0	0	487	445
2001	4818	5328	0	0	0	0	0
2002	2029	10285	1423	0	531	531	491
2003	4049	3054	1607	0	0	524	506
Women							
1984	806	384	0	N/A	0	0	0
1986	754	0	0	N/A	0	0	0
1987	897	504	0	N/A	0	0	0
1988	686	686	0	N/A	0	0	0
1989	841	366	0	N/A	0	0	0
1990	0	0	0	N/A	0	0	0
1991	0	376	0	N/A	387	0	0
1992	0	0	0	N/A	981	0	0
1993	4168	3832	757	N/A	0	0	0
1994	3088	2055	0	N/A	1177	0	1192
1995	5296	907	0	N/A	806	400	1773
1996	3981	2525	0	N/A	1673	991	363
1997	5803	1275	0	N/A	0	0	409
1998	8499	3487	738	N/A	1166	0	373
1999	3297	1407	356	N/A	425	899	1445
2000	2442	4463	0	N/A	492	0	2340
2001	6382	3434	1147	N/A	0	990	1214
2002	5199	1988	0	N/A	2145	463	0
2003	4338	3056	560	N/A	0	0	0

Source: Quarterly Labour Force Surveys (1992–2003).

groups such as Black Caribbean, Indian and Pakistani compared with others (Table 2).

Due to the small numbers of observations provided by the data, and in keeping with QLFS's minimum publication thresholds (OPCS, 2003: 117) and

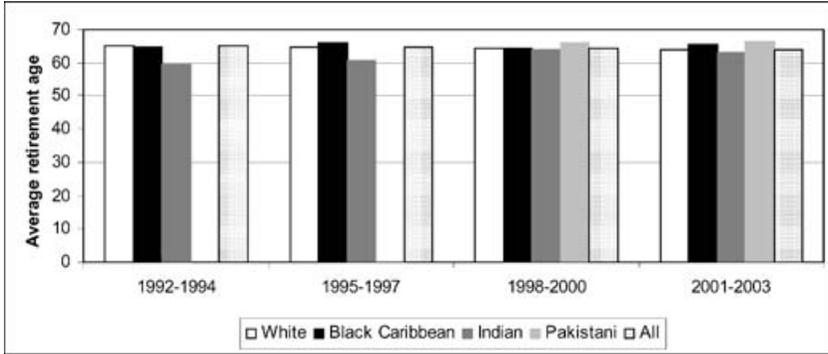


Figure 4. The average male retirement age by ethnic group time series (1992–2003)
 Source: *Quarterly Labour Force Surveys* (1992–2003).

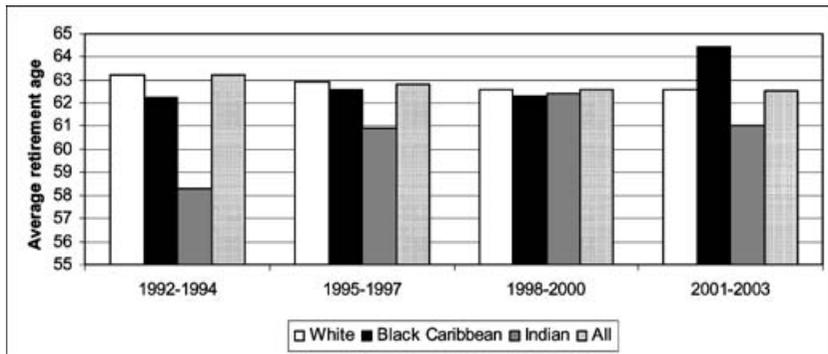


Figure 5. The average female retirement age by ethnic group time series (1992–2003)
 Source: *Labour Force Surveys* (1984–90); *Quarterly Labour Force Surveys* (1992–2002).

other authors (Ginn and Arber, 2001), we combine the computed average retirement age of various ethnic groups across three year periods. We then produce time series of these computations for men and women from 1992 to 2003 as shown in Figures 4 and 5, respectively.

Based on our computations, the average retirement age of the White male group reduced by a year from 65 in the early 1990s to 64 in the early 2000s; this trend corresponds to that in Figure 2 as the White group constitutes the significant majority of the observations provided by the QLFS data. The average retirement age of the Black Caribbean ethnic group, on the other hand, rose by 0.5 year over the same period from 64.9 to 65.4. It is 1.5 years higher than that of the White group in 2001–03. The average retirement age of the Indian group rose the highest by 3.7 years from 59.3 to 63 over the period in question. However, their retirement age in 2001–03 is a year lower than that of the White group. The Pakistani group, who feature in only the last two categories of years, have relatively higher average retirement ages compared to the other ethnic groups. This has increased from

65.9 to 66.2, which is 2.2 years higher than the White group's. The picture that emerges from Figure 4 indicates that the average retirement age of male ethnic minority groups, other than Indians, is higher than the average retirement age in the UK, particularly for Pakistanis. This is similar to the findings of Ginn and Arber (2001).

The average retirement age of the White female group decreased by 0.6 year from 63.2 in the early 1990s to 62.6 in the early 2000s; this trend, similar to that of the White male group, follows that in Figure 2 for the reasons discussed above. The average retirement age of the female Black Caribbean ethnic group rose by 2.2 years from 62.2 to 64.4 over the same period, exceeding the average retirement age of the White group by 1.8 years in the period 2001–03. The average retirement age of the female Indian group, similarly to the males, rose considerably by 2.7 years from 58.3 to 61 in the period being considered. This is 1.6 years lower than that for the White group. Figure 5 therefore depicts that the average retirement age of the female Black Caribbean group is higher than the average female retirement age. This finding is also in line with that of Ginn and Arber (2001).

In summary, we indicate that the change in the retirement age trend took place in the early rather than the mid or late 1990s as is currently claimed. Based on our computations of the actual mean retirement age using the LFS and QLFS data in the period 1984–2003, we argue that the trend toward early retirement has slowed down for men to the 1988 level and reversed for women to the 1960 level, depicting a gradual closure of the gap between the genders. The reversal in the trend for both men and women occurred in 1991, peaking in 1992 by 2.7 years for men and 4.1 years for women. An analysis of the retirement age profiles of various ethnic groups in the period 1992–2003 reveals that endogenous factors such as ethnicity lengthen the average retirement age of both male and female Black Caribbeans and male Pakistanis relative to their White counterparts.

The link between occupational pension schemes and retirement age

There is consensus among policy makers and academics about the relationship between occupational pensions and retirement age. Both groups believe that people with occupational pensions retire earlier than those without, and DB pension schemes reduce retirement age while DC schemes increase it (Pensions Commission, 2004; Banks and Casanova, 2004; Blake, 2004). In order to explore the influence of occupational pensions on retirement age and the extent to which it explains retirement trends, we examine the changes in occupational pension scheme membership, the percentage of retired men and women by their pension status, and the percentage of those with occupational pensions by age groups.

The twelfth survey by the Government Actuary Department presents data on active membership of occupational pension schemes in the UK, by gender, since

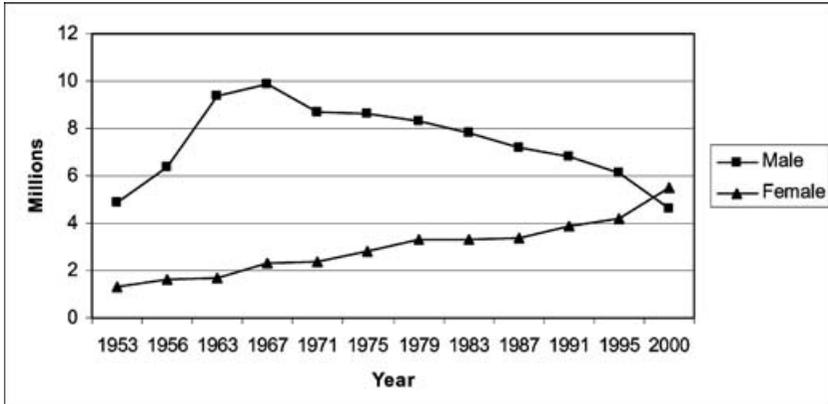


Figure 6. Active membership of occupational pension schemes by sex (1953–2000)
 Source: GAD (2005).

1953 (GAD, 2005). The data include membership of occupational pension schemes in both public and private sectors. A time series of the data indicates a decline in occupational pension scheme membership of men since 1967 to below the 1953 level, in contrast to a steady rise in membership of women since 1953 (Figure 6).⁴ The trends do not correspond to those of the actual mean retirement age of men and women presented in Figure 2. This is because occupational pension membership is not inclusive of all employees, and the data presented in Figure 6 are not representative of the whole working population (in 1995 only 46 per cent of the working population were members of occupational pensions; GAD, 2001). On the other hand, the actual mean retirement ages presented in Figure 2 reflect the average ages at which all men and women surveyed in a particular year retired and are therefore more representative of the working population.

Until 1988, when the government facilitated individuals' contracting out to DC pension schemes, occupational pensions comprised mainly DB schemes. Therefore, the graphs in Figure 6 represent the trends in membership of DB schemes by men and women until 1991. From 1991 changes in the composition of private occupational pensions, in terms of the shift away from DB to DC schemes, occurred. A comparison of the number of employees in occupational pension schemes in the period 1991–2004 indicates an increase of 2 per cent in the membership of DB schemes (although the true size of the membership in 2004 is unknown as it includes hybrid schemes). It also indicates a decline of 2 per cent in the membership of DC schemes (Table 3). Since 2000, however, the membership of DB schemes has declined by 2 per cent and that of DC schemes has risen by 3 per cent.

Blundell *et al.* (2002) relate the decrease in coverage of DB pension schemes since 1991 to the growth in personal pensions, changing employment patterns

TABLE 3. Active members of occupational pension schemes (1991–2004).

Year	Number of employees		
	DB (% of all employees)	DC (% of all employees)	Hybrid* (% of all employees)
1991	5,600,000 (86%)	900,000 (14%)	0
1995	8,900,000 (86%)	1,100,000 (11%)	300,000 (3%)
2000	9,100,000 (90%)	900,000 (9%)	100,000 (1%)
2004	8,630,000 (88%)	1,180,000 (12%)	included in DB

Note: * Hybrid refers to schemes that include both DB and DC schemes.

Source: Government Actuary’s Department (1995, 2001, 2003, 2005).

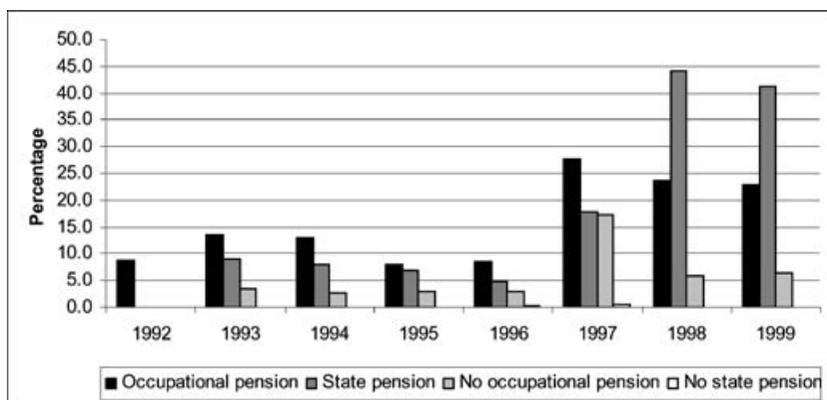


Figure 7. Percentage of retired men by pension status

Source: *Quarterly Labour Force Surveys* (1992–99).

(flexible working and fixed-term contracts), a shift to smaller employers, and increasing pension choice among individuals. In terms of pension scheme provision, the changes in membership of occupational pensions reflect the formation of sectionalised schemes as a result of DB schemes closing their DB sections to new employees and admitting new members into their newly opened DC sections (GAD, 2005). However, these changes by themselves do not explain the variations that have taken place in retirement age trends of men and women since 1991. We need to relate the changes to the percentage of retirees and their pension status in order to observe the relationship between occupational pensions and retirement age. Using computed and existing variables from QLFS (1992–99),⁵ we obtain data about the percentage of retired respondents with occupational pensions, with state pensions, with no occupational pension, and with no state pension (Figure 7). The time series of the data indicates an increase in the proportion of retired men with occupational pensions from 1992 to 1999.



Figure 8. Percentage of retired women by pension status

Source: *Quarterly Labour Force Surveys (1992–99)*.

This corresponds to a 1.7 years drop in the actual mean retirement age of men during the same period discussed in the previous section.

A similar situation is portrayed in respect of retired women. The proportion of those with occupational pensions rises between 1992 and 1999, with a slight reduction between 1997 and 1999. This corresponds to a drop of 1.2 years in the actual mean retirement age of women during the same period, also discussed in the previous section (Figure 8). Figures 7 and 8 go some way to indicating that an increase in the proportion of retirees with occupational pensions correlates to a decrease in retirement age.

The relation between occupational pensions and retirement behaviour has been argued widely in the literature (for example, Disney *et al.*, 1994; Blundell and Johnson, 1998; Blundell *et al.*, 2002). However, analyses of the retirement surveys 1988/9 and 1994 have indicated that only 10 per cent of early retirement is attributed to membership of occupational pensions compared with 30 per cent ascribed to ill health (Disney *et al.*, 1997). In order to investigate the significance of occupational pensions on the decision to retire, we need to examine the proportions of retirees in different age groups with occupational pensions. Using computed and existing variables from QLFS (1992–99),⁶ we obtain data about the percentage of retired respondents in the 50–4, 55–9, 60–4, and 65-plus age groups that were receiving occupational pensions. The time series of the data indicates that among retired men with occupational pensions, except for those in 1992, the highest proportions are in the 60–4 and 65-plus age groups (Figure 9). This finding corresponds with the information on active members of occupational pension schemes (Table 1). The majority of active members of occupational pensions are in schemes with normal retirement ages of 60 and 65.

Among retired women with occupational pensions, with the exception of those in 1992, the highest proportion is in the 60–4 age group (Figure 10).

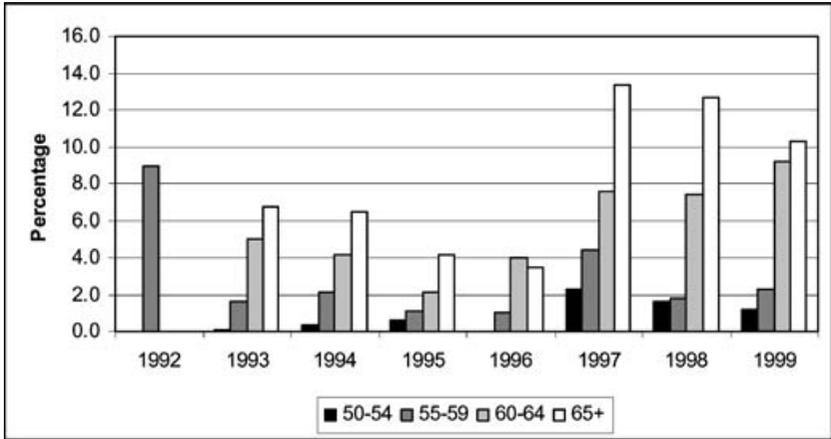


Figure 9. Percentage of retired men with occupational pensions by age
 Source: *Quarterly Labour Force Surveys* (1992–99).

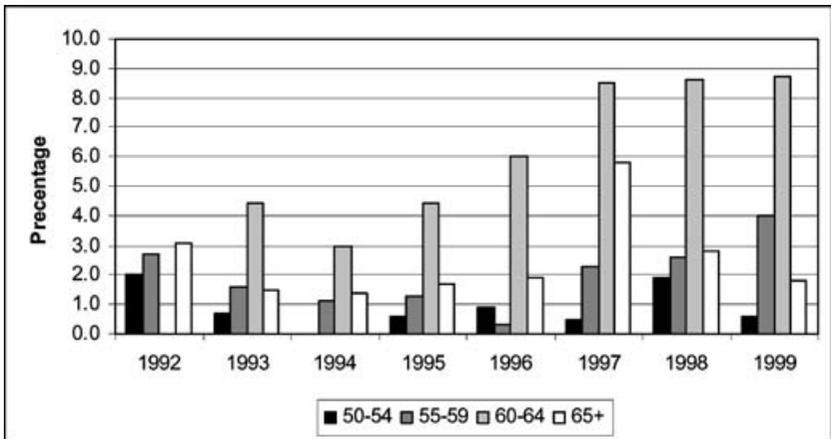


Figure 10. Percentage of retired women with occupational pensions by age
 Source: *Quarterly Labour Force Surveys* (1992–99).

The proportion of women in this group rose by about 4 per cent from 1993 to 1999 and predominates in the late 1990s. This finding also corresponds with the information in Table 1, which indicates that the highest active members are in schemes with a NRA of 60. The limiting characteristic of Figures 9 and 10 is the small proportions of retired men and women they present. This is due to the high number of missing variables in the available data.

Blundell and Johnson (1998) identify two divergent incentives for retirement in occupational pension schemes: one is related to pension wealth and the other to the link between pension entitlement and final earnings. On the one hand, if the occupational pension income of individuals who become eligible for retirement

after the age of 55 is higher than their earnings, they are more likely to retire. On the other hand, if continued employment leads to increases in individuals' final earnings they are more likely to work longer.

In summary, the evidence reviewed in this section indicates that the rise in the proportion of men and women with occupational pensions between 1992 and 1999 paralleled a drop in the actual mean retirement age of men and women in the same period. It also shows that the highest proportion of retired men and women with occupational pensions are in the 60–64 and 65-plus (in the case of men) age groups, which broadly correspond to the highest active members of occupational pensions with NRAs of 60 and 65 (Table 1). However, the relatively small proportions of people presented by the evidence at best question and at worst limit the significance of the impact of their membership of occupational pensions on the actual mean retirement age.

Relation between pension type, expectations of retirement age and early retirement

As discussed in the introduction, one of the goals of government social policy regarding retirement age is to defer it. One way of achieving this is to reverse the planned influences that reduce retirement age such as membership of occupational pensions and specifically DB schemes. From Table 3 we know that the shift from DB to DC pension schemes in the private sector has so far been limited as 88 per cent of active members of occupational pensions in 2004 belonged to DB schemes. We also know that DB scheme coverage does not extend to the whole population and has been declining among men since 1967. Therefore, in order to examine the extent of the impact of DB schemes on planned retirement age, we need to draw correlations between membership of these schemes and the expected retirement age/early retirement of men and women who belong to them. Although researchers using the longitudinal Health and Retirement Study have found that one third of their sample was affected by unplanned changes to their retirement age during their fifties and early sixties (for example, Williamson and McNamara, 2003), there is evidence indicating that many workers retire within a year of their expected retirement age (for example, Ekerdt *et al.*, 1989).

Currently the only up-to-date source of data on retirement age and occupational pensions that to some degree distinguishes between DB and DC pension schemes is ELSA (Marmot *et al.*, 2002–03). This survey provides data on economic, social, psychological and health of people aged 50 or over from which information on their retirement behaviour can be derived. It covers a sample of 11,578 private households in England containing 18,813 eligible individuals of whom 11,392 are core sample members. The variables on ethnicity, however, have been combined into multiple ethnicity variables such as: White, mixed ethnic

TABLE 4. Expectations of working after age 55/60/65, by type of pension currently contributing to, age group and gender: economically active individuals.

	50–59		60–64		
	Defined benefit	Defined contribution	Defined benefit	Defined contribution	
Economically active men					
Average probability of working after age 60	56.2	74.0	37.8	51.9	Average probability of working after age 65
Economically active women					
Average probability of working after age 55	82.6	83.9	51.1	50.5	Average probability of working after age 60

Source: Banks and Casanova (2005).

group, Black, Black British, Asian, Asian British, and any other group. ELSA data do not distinguish between ethnic groups in the same way that LFS and QLFS variables do. Therefore they cannot be used to examine variations across ethnic groups.

Although ELSA does not contain data on expected retirement age of respondents, Banks and Casanova's (2004) derived data from ELSA provide information relating to expectations of working after age 55, 60 and 65 by economically active men and women, which we draw upon. The data indicate that among economically active men aged 50–9, the average probability of working after age 60 is lower for those with DB pension schemes (56.2 per cent) than those with DC pension schemes (74.0 per cent) (Table 4). The average probability of working after age 65 is also lower for men aged 60–4 with DB schemes (37.8 per cent) than those with DC schemes (51.9 per cent) albeit to a lesser extent. Among economically active women aged 50–4 the average probability of working after age 55 is only slightly less for those with DB pension schemes (82.6 per cent) than those with DC schemes (83.9 per cent). On the other hand, the average probability of working after age 60 for women aged 55–9 is slightly more for those with DB schemes (51.1 per cent) than those with DC schemes (50.5 per cent). This is attributable to women's aspiration to build DB pension rights. Traditionally women have had broken work histories and engaged in high levels of part-time work both of which lower DB pension rights (Gough, 2002).

The correlation of early retirement with membership of DB schemes is not straightforward as ELSA does not provide data regarding the pension membership of people who report to have taken early retirement. We therefore estimate the correlation from the relationship between the proportion of men

TABLE 5. Percentage taking early retirement by lifetime occupational pension status, gender and age group.

	50–54%	55–59%	60–64%	65+%	All %
Men					
Taking early retirement	14.6	32.0	46.0	3.2	100.0
Ever belonged to occupational pension scheme	15.4	32.5	44.5	3.3	100.0
Women					
Taking early retirement	23.9	55.7	13.3	0.6	100.0
Ever belonged to occupational pension scheme	24.1	55.3	13.5	0.4	100.0
Sample sizes:					
Men					
Taking early retirement	183.2	402.2	578.1	40.6	1257.9
Ever belonged to occupational pension scheme	175.0	370.0	507.0	38.0	1139.0
Women					
Taking early retirement	139.0	323.2	77.1	3.2	580.6
Ever belonged to occupational pension scheme	127.0	291.0	71.0	2.0	526.0

Source: *English Longitudinal Survey of Ageing* (2002–03).

and women who reportedly took early retirement and their lifetime membership of employer-provided occupational pension schemes (Table 5). Based on this relationship, over 90 per cent of both men and women who took early retirement have belonged to occupational pension schemes. The highest proportion of men in the two categories is in the 60–4 age group and the highest percentage of women is in the 55–9 age group.

Furthermore, consideration of men's and women's reasons for early retirement indicates that being offered reasonable financial terms to retire early or take voluntary redundancy, which is associated with DB pension schemes, is the most prominent self-reported reason (Table 6). It is stronger for men than for women, however, as 30.5 per cent of male respondents declared it as a reason for retiring early compared with 17.5 per cent of female respondents. In the case of women, the desire to enjoy life while still young and fit enough was given as the second most important reason for retiring early (15.7 per cent). Research in America has cast doubt on the accuracy of self-reported reasons for retirement on two grounds. One is that two or more causes may interact to create the real reason for the retirement of an individual and the other is that participants' responses relate to the way the questions are posed (Quinn *et al.*, 1990). Therefore self-reported reasons need to be treated with caution.

In summary, the evidence presented in this section suggests that the probability of economically active men working beyond ages 60 and 65 and economically active women working beyond age 55 is smaller for those with DB

TABLE 6. Reasons for early retirement, by gender.

	%
Men	
Don't Know	0.6
Own ill health	13.4
Ill health of a relative/friend	5.4
Made redundant/dismissed/had no choice	14.0
Offered reasonable financial terms to retire early or take voluntary redundancy	30.5
To spend more time with partner/ family	3.4
To enjoy life while still young and fit enough	17.6
Fed up with job and wanted a change	9.6
To retire at the same time as husband/wife/partner	0.9
To give the young generation a chance	0.9
Other (specify)	3.8
Women	
Own ill health	13.9
Ill health of a relative/friend	10.3
Made redundant/dismissed/had no choice	6.3
Offered reasonable financial terms to retire early or take voluntary redundancy	17.5
Could not find another job	1.7
To spend more time with partner/ family	13.5
To enjoy life while still young and fit enough	15.7
Fed up with job and wanted a change	9.8
To retire at the same time as husband/wife/partner	8.2
Other (specify)	3.2
Sample size:	
Men	309.6
Women	145.7

Source: *English Longitudinal Survey of Ageing (2002–03)*.

pension schemes compared with those with DC pension schemes. The evidence indicates that women in the 55–9 age group with DB schemes are more likely to work after age 60 than those with DC schemes contrary to their male counterparts. The evidence also suggests that men and women who have at some stage in their life belonged to occupational pension schemes are more likely to have retired early.

Conclusion

In this article we present the changes in the actual mean retirement age of males and females in the period 1984–2003 and report on variations among various ethnic groups using data from LFS (1984–91) and QLFS (1992–2003). We then explore the nature of the link between occupational pension schemes and retirement age of both males and females using data from the twelfth survey by the Government Actuary Department and QLFS (1992–99). Lastly, we examine

the impact of pension type on the expected retirement age and early retirement of men and women using data from ELSA (2002–03).

Our review of the average actual retirement age time series in the UK, as well as updating the existing literature, indicates that the changes in male and female retirement age trends occurred in the early rather than the mid or late 1990s. This is consistent with the Pensions Commission (2004) findings in terms of presenting a change in the direction of the trend in mean retirement age. The discrepancy in the actual point in time at which the change occurred may be ascribed to the Pensions Commission's use of data at five-year intervals. A closer examination of ethnic minority groups' actual mean retirement age indicates disparities among the groups in terms of their retirement age profiles. Certain groups such as the Black Caribbean men and women and Pakistani men are shown to have higher retirement ages relative to their White counterparts. This is in keeping with previous findings (for example, Ginn and Arber, 2001).

The evidence we present in relation to membership of occupational pensions and retirement age suggests two correlations. Firstly, the increase in the proportion of people with occupational pensions relates to a decrease in the actual mean retirement age from which we conclude that people with occupational pensions retire earlier. Secondly, the age groups of the majority of retirees coincide with the normal retirement ages of pension schemes with the greatest active members, namely 60 and 65. From this we conclude that occupational pensions have a direct impact on the decision to retire. The only factor limiting the scope of these correlations, and hence the ability to draw broad generalisations from them, is the relatively small number of observations presented by the data.

The evidence supporting the relation between pension type, expectations of retirement age and early retirement proposes further correlations. One association is between membership of DB pension schemes and the expectation to retire after ages 60 and 65, in the case of economically active men, and 55 in the case of economically active women. Economically active women aged 55–9 demonstrate the exceptional case of women who want to work to acquire pension rights. These are potentially the category of employees who would benefit from the anti-age discrimination legislation. The other association is between belonging to an occupational pension scheme and taking early retirement.

The picture that emerges from the evidence presented in this article from a social policy perspective is that in the long term the retirement age of both men and women will increase. This is due to two factors. Firstly, the aspirations of the majority of employees who do not belong to DB pension schemes to improve their financial status for retirement and their ability to do so with the introduction of legislation prohibiting age discrimination. Secondly, the declining membership of DB pension schemes, which tend to encourage early retirement and the increase in the membership of DC schemes, which discourage early retirement among

employees. Furthermore, the government's implementation of the Framework Directive's prohibition of age discrimination and facilitation of the conditions for employees to continue working beyond 65 is likely to strengthen the current trends in retirement age.

Acknowledgement

Ben Knowman is thanked for his editorial comments on the article.

Notes

- 1 www.cas.lancs.ac.uk/short_courses/intro_spss.html
- 2 www.cas.lancs.ac.uk/short_courses/intro_spss.html
- 3 In 1992 the information relating to the labour market was collected on a quarterly basis hence giving rise to QLFs. This may, to a degree, account for the sharp reversal in the retirement age trend.
- 4 The data for 2005 have been excluded from the graph as a significant proportion of reported occupational pension scheme membership does not distinguish between the sexes.
- 5 From 2000, questions relating to respondents' occupational pensions were eliminated from QLFs due to the coverage of relevant information by Family Resources Survey.
- 6 From 2000, questions relating to respondents' occupational pensions were eliminated from QLFs due to the coverage of relevant information by the Family Resources Survey.

References

- Banks, J. and Blundell, R. (2005), 'Private pension arrangements and retirement in Britain', *Fiscal Studies*, 26: 1, 35–53.
- Banks, J., Blundell, R., Disney, R. and Emmerson, C. (2002), *Retirement, Pensions and the Adequacy of Saving: A Guide to the Debate*, Institute for Fiscal Studies Briefing Note 29, London: Institute for Fiscal Studies.
- Banks, J. and Casanova, M. (2004), 'Work and retirement', in M. Marmot, J. Banks, R. Blundell, C. Lessof and J. Nazroo (eds), *Health, Wealth and Lifestyles of the Older Population in England: the 2002 English Longitudinal Study of Ageing*, London: Institute for Fiscal Studies.
- Blake, D. (2004), 'The impact of wealth on consumption and retirement behaviour in the UK', *Applied Financial Economics*, 14: 555–76.
- Blöndal, S. and Scarpetta, S. (1998), *The Retirement Decision in OECD Countries*, OECD Economics Department Working Papers 202, Paris: OECD.
- Blundell, R. and Johnson, P. (1998), 'Pensions and labour-market participation in the United Kingdom', *The American Economic Review*, 88: 2, Papers and proceedings of the hundred and tenth annual meeting of the American Economic Association, 168–72.
- Blundell, R. and Tanner, S. (1999), 'Labour force participation and retirement in the UK', Paper prepared for the US National Academy of Sciences, Institute of Fiscal Studies.
- Blundell, R., Meghir, C. and Smith, S. (2002), 'Pension incentives and the pattern of early retirement', *The Economic Journal*, 112: March, 153–70.
- Cabinet Office (2000), *Winning the Generation Game: Improving Opportunities for People aged 50–65 in Work and Community Activity*, A Performance and Innovation Unit Report, April.
- Department of Trade and Industry (DTI) (2003), *Equality and Diversity: Age Consultation*, London: DTI.

- Department of Trade and Industry (DTI) (2005), 'Partial regulatory impact assessment', Employment Relations Directorate, Retirement ages, <http://www.dti.gov.uk/er>.
- Department for Work and Pensions (DWP) (2005), 'Ministers' speeches: Launch of IPPR report on working later – Stephen Timms', http://www.dwp.gov.uk/aboutus/2005/01_08_05.asp
- Disney, R., Grundy, E. and Johnson, P. (1997), *The Dynamics of Retirement: Analyses of the Retirement Surveys*, Social Research Division, Research Report 72, London: Department for Work and Pensions.
- Disney, R., Emmerson, C. and Wakefield, M. (2004), *Ill Health and Retirement in Britain: A Panel Data Based Analysis*, Institute of Fiscal Studies Working Papers, W03/02.
- Disney, R., Meghir, C. and Whitehouse, E. (1994), 'Retirement behaviour in Britain', *Fiscal Studies*, 15: 1, 24–43.
- Ekerdt, D. J., Vinick, B. H. and Bosse, R. (1989), 'Orderly endings: Do men know when they will retire?', *Journal of Gerontology*, 44: 1, 528–35.
- Government Actuary's Department (GAD) (1995), *Occupational Pension Schemes 1991, Ninth Survey by the Government Actuary*, London: Government Actuary's Department.
- Government Actuary's Department (GAD) (2001), *Occupational Pension Schemes 1995, Tenth Survey by the Government Actuary*, London: Government Actuary's Department.
- Government Actuary's Department (GAD) (2003), *Occupational Pension Schemes 2000, Eleventh Survey by the Government Actuary*, London: Government Actuary's Department.
- Government Actuary's Department (GAD) (2005), *Occupational Pension Schemes 2004, The Twelfth Survey by the Government Actuary*, London: Government Actuary's Department.
- Gendell, M. and Siegel, J. S. (1992), 'Trends in retirement age by sex, 1950–2005', *Monthly Labor Review*, 115: 7.
- Ginn, J. and Arber, S. (2001), 'Pension prospects of minority ethnic groups: inequalities by gender and ethnicity', *British Journal of Sociology*, 52: 3, 519–39.
- Gough, O. (2002), 'Factors that influence voluntary and involuntary retirement', *Pensions*, 8: 3, 252–64.
- Guillemard, A.-M. (1997) 'Re-writing social policy and changes within the life course organisation: a European perspective', *Canadian Journal on Aging*, 16: 3, 441–64.
- Hirsch, D. (2003) *Crossroads After 50: Improving Choices in Work and Retirement*, London: Joseph Rowntree Foundation.
- Marmot, M., Banks, J., Blundell, R., Erens, B., Lessof, C. and Nazroo, J. (2002–2003) *English Longitudinal Study of Ageing: Wave 1, 2002–2003* [computer file], 3rd Edition, Colchester, Essex: UK Data Archive [distributor], September 2005. SN: 5050.
- Meadows, P. (2003), *Retirement Ages in the UK: A Review of the Literature*, Employment Relations Research Series, No. 18, London: DTI.
- Meghir, C. and Whitehouse, E. (1994), 'Retirement behaviour in Britain', *Fiscal Studies*, 15: 1, 24–43.
- Meghir, C. and Whitehouse, E. (1997), 'Labour market transitions and retirement of men in the UK', *Journal of Econometrics*, 79, 327–54.
- Office of Population Censuses and Surveys, *Labour Force Survey*, (1984), 1986, 1987, 1988, 1989, 1990, 1991 [computer file], Colchester, Essex: UK Data Archive [distributor].
- Office of Population Censuses and Surveys, *Quarterly Labour Force Survey*, March–May, (1992), 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003 [computer file], Colchester, Essex: UK Data Archive [distributor].
- Office of Population Censuses and Surveys, *Quarterly Labour Force Survey*, June–August, (1992), 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003 [computer file], Colchester, Essex: UK Data Archive [distributor].
- Office of Population Censuses and Surveys, *Quarterly Labour Force Survey*, September–November, (1992), 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003 [computer file], Colchester, Essex: UK Data Archive [distributor].
- Office of Population Censuses and Surveys, *Quarterly Labour Force Survey*, December 1992–February 1993, December 1993–February 1994, December 1994–February 1995, December 1995–February 1996, December 1996–February 1997, December 1997–February 1998,

- December 1998–February 1999, December 1999–February 2000, December 2000–February 2001, December 2001–February 2002, December 2002–February 2003, December 2003–February 2004, [computer file], Colchester, Essex: UK Data Archive [distributor].
- Pensions Commission (2004), *Pensions: Challenges and Choices: The First Report of the Pensions Commission*, London: TSO, www.pensionscommission.org.uk.
- Pensions Commission (2005), *A New Pension Settlement for the Twenty-First Century, The Second Report of the Pensions Commission*, London: TSO, www.pensionscommission.org.uk
- Quinn, J., Burkhouser, R. and Myers, D. (1990), *Passing the Torch: The Influence of Economic Incentives on Work and Retirement*, Michigan: UpJohn Institute.
- Robinson, P., Gosling, T. and Lewis, M. (2005), *Working Later: Raising the Effective Age of Retirement*, London: IPPR.
- Tanner, S. (1998), 'The dynamics of male retirement behaviour', *Fiscal Studies*, 11, 55–70.
- Vickerstaff, S., Baldock, J., Cox, J. and Keen, L. (2004), *Happy Retirement? The Impact of Employers' Policies and Practice on the Process of Retirement*, London: The Policy Press.
- Williamson, J. B. and McNamara, T. K. (2003), 'Interrupted trajectories and labour force participation', *Research on Aging*, 25, 87–121.