

Fiscal Studies (1998) vol. 19, no. 2, pp. 197-215

# The Dynamics of Incomes and Occupational Pensions after Retirement

PAUL JOHNSON, GARY STEARS and STEVEN WEBB\*

#### Abstract

This paper uses two waves of the UK Retirement Survey to look at how incomes change during retirement. We concentrate on men aged 65–69 and women aged 60–69 in 1988–89 and look at how their incomes change over the following five years. Overall, we find a considerable degree of stability in real incomes. We use the panel data to look at the incomes of widows before and after they are widowed and find that, for this group of relatively young widows, their low incomes are in large part determined by the fact that it tends to be the relatively poorer husbands who die among this age-group. Finally, we consider the most important component of private income — occupational pensions — separately. We find a strong relationship between pension level and the probability of indexation — pensions that start low are less likely than higher pensions to keep up with inflation.

JEL classification: D31, H55.

## I. INTRODUCTION

Older pensioners are poorer than the more recently retired. This fact has been confirmed in numerous studies in the UK (see Johnson and Stears (1995 and

\*Paul Johnson is a Deputy Director of the Institute for Fiscal Studies (IFS). Gary Stears and Steven Webb were at IFS at the time of writing and are now at the Association of British Insurers and an MP respectively. The Retirement Survey was carried out by the Office for National Statistics (ONS) on behalf of the Department of Social Security (DSS). The DSS provided the finance for the initial analysis of the Retirement Survey dataset. The analysis carried out for this paper was funded by the ESRC Research Centre for the Microeconomic Analysis of Fiscal Policy. The interpretation of the data in this paper is the responsibility of the authors alone.

1998), for example) as well as in the US (Radner, 1987) and elsewhere. But this simple fact actually tells us rather little about what happens to the incomes of particular pensioners during their retirement.

In this paper, we make use of the panel data in the Retirement Survey to answer the question 'what happened to the incomes of a sample of retired people in Britain as they grew older between 1988–89 and 1994?'. Are their incomes adequately indexed, do they fall as people age or are they maintained or even increased as extra resources come their way, perhaps from inheritances or gifts? As far as we know, this is the first time this issue has been directly addressed in the UK context, though Jarvis and Jenkins (1997), in their work using the British Household Panel Survey, show that pensioners' household incomes are relatively stable, at least where the composition of the household does not change. In the US context, Burkhauser, Holden and Feaster (1988) showed, using the Retirement History Survey, that married pensioners had fairly stable incomes during the 1970s and that only a few fell into poverty — and this, of course, was a period during which they would have experienced considerable inflation. I

In this paper, we confirm the relative stability of pensioners' incomes, at least in the first few years after retirement. But we also elucidate the complexity that underlies this overall stability. We find little evidence of falling real income in the first years of retirement.

Despite the lack of prior work, largely resulting from data deficiencies in the UK, the issue of what happens to pensioners' incomes after retirement is an important one. If private sources of income are inadequately indexed, then the state may have to step in either to improve the indexation procedures or to provide better levels of social security benefits. If older pensioners are poorer than younger ones not just because they come from a poorer birth cohort, then it is possible that more policy options will be available to ameliorate their situation than otherwise. The living standards of widows might be of special concern.

In fact, this is a set of issues that series of cross-sections of data, widely used in looking at pensioner incomes and in comparing the incomes of pensioners of different ages, are especially ill equipped to tackle. In the first place, each birth cohort will have different levels of income and may also have different lifetime trajectories of income. Second, there is a problem of differential mortality. The average incomes of 75-year-olds now actually appear to be greater than the average incomes of 65-year-olds 10 years ago because the poorest members of the cohort tend to die younger than their richer contemporaries (see Johnson and Stears (1998) for a detailed analysis of this issue).

<sup>&</sup>lt;sup>1</sup>The study only included couples that were not in poverty just before retirement. Single people and couples below the poverty line just before retirement were ignored. It could well be that their incomes are much less stable.

This paper uses the Retirement Survey to look at the incomes, and especially the private pensions, of retired people<sup>2</sup> and how they change over time. We start, in Section II, by considering some measurement issues, then look in Section III at changes in individuals' incomes over the period of the surveys, before moving on to examine widows' incomes in detail in Section IV. A remarkable degree of stability is observable. We devote Section V to looking specifically at what happens to occupational pensions post-retirement where an important issue that is thrown up is the positive correlation between the initial size of pension and the probability of the pension being adequately indexed for inflation.

#### II. DATA AND MEASUREMENT ISSUES

The data used here come from the two waves of the Retirement Survey collected in 1988–89 and in 1994. We use information on over 1,200 individuals who were retired in both waves of the survey. As with most surveys of this type, information was collected on incomes from a variety of sources — pensions, earnings, social security, investments and so on. And the same information was collected from the same people in the two surveys.

The breakdown by age and gender of the people who were retired in both surveys is presented in Table 1. One important point to note about the figures in the table is that they show that a significant minority of those retired throughout were actually under state pension age (60 for women, 65 for men) in 1988–89. In the analyses that follow, we will separate out this group from the rest. This is an important distinction because of the way the UK benefit system works. Many men who are entitled to occupational pensions retire and take their pension before the age of 65. At this point, they will not receive state retirement benefits. On reaching 65, they will start drawing the basic state pension (£64 per week in 1998) and any (usually small) earnings-related additions. For this group, reaching state pension age will result in an increase in their income. On the other

 ${\bf TABLE~1}$   ${\bf Age~and~Gender~Breakdown~of~Those~Retired~in~Both~Waves}$ 

| Age in 1988–89 | Male | Female | Total |
|----------------|------|--------|-------|
| 55–59          | 58   | 115    | 173   |
| 60–64          | 143  | 306    | 449   |
| 65–69          | 267  | 353    | 620   |
|                |      |        |       |
| All            | 468  | 774    | 1,242 |

<sup>&</sup>lt;sup>2</sup>Where being retired is self-assessed.

hand, while state pensions only officially become available at 65, many men do in fact receive state incapacity benefits (a quarter of *all* men aged 60–64) or means-tested benefits before this. For this group, reaching the age of 65 is of less importance in determining the level of income from the state.

Most studies of incomes and income inequality use a family unit or household definition of income in order to make useful comparisons of living standards among individuals. That is, they sum the incomes of the individuals living in a family or household and assign the total (usually equivalised) to each individual. Given that these studies are usually interested in getting at some measure of living standards and that the living standards of husbands and wives, for example, are generally dependent on their spouse's income, this is a natural and appropriate way of doing things.

In looking at how individuals' incomes change over time, however, it is often more useful actually to look at individual incomes. This is because we are interested not just in changes in living standards but in how amounts of income of various sorts develop over time.

Using the Retirement Survey, we are able to do this, and, for most of this paper, we effectively treat people as isolated individuals, without taking account of the incomes of their spouse or anybody else with whom they might live. In most cases, this seems appropriate, and it certainly makes for easier interpretation of the figures, but for one group — those who were widowed during the period under consideration — simply looking at the individual's income would be inadequate. The personal income of a woman tends to increase following the death of her husband, but this does not mean that she becomes better off. In considering widows, it is important to compare their income after widowhood with the total of their and their husband's incomes before his death.

Various components of income are considered and, when looking at total income, a measure of 'usual gross weekly income' is calculated. This is defined as the total of before-tax income from earnings, pensions, investments and social security benefits. To strip out the effects of inflation between the two surveys, all monetary values for incomes at the individual level are converted to January 1996 prices, using the all-items RPI.<sup>4</sup>

Finally, note that all the results that follow are based on data weighted to take account of differential non-response between the two waves of the survey. Details of the weighting procedures are given in the Appendix to Disney, Grundy and Johnson (1997) and in essence they take account of the fact that non-

<sup>&</sup>lt;sup>3</sup>We assign incomes including state benefits to the individual who records the receipt in the survey. For a pensioner couple receiving retirement pension, this would generally mean the husband being assigned the full rate of single basic pension and the wife getting the dependant's addition.

<sup>&</sup>lt;sup>4</sup>Strictly speaking, the most appropriate price index to use would be an all-items RPI based on *net* rather than gross housing costs. This is because the income has to cover all goods and services except that part of housing costs that will be met by housing benefits. The construction of such an index would, however, be complex and would be unlikely to have a significant effect on the results of this analysis.

response was significantly higher among those from lower social class and lower income backgrounds.

# III. INCOME DYNAMICS

As we have observed, many of those who were retired in 1988–89 were then below state pension age. These individuals are different from the over-state-pension-age group, partly in that they are a self-selecting group and partly in that they are from a slightly later date-of-birth cohort, but most importantly, from our point of view, in that they have different rights to social security benefits, and rights that change differently over time.

In Table 2, we present detailed results just for that group who had already reached pension age in the first survey. Results for those who were retired but under state pension age are shown in Table A.1 in the Appendix. The main differences between this group and the main group over pension age in 1988–89 are that (i) they had much higher levels of 'other state benefits' in 1988–89, (ii) their overall income levels rose significantly between the two surveys as they became entitled to state pension over the period and (iii) being a self-selecting group, and being from later date-of-birth cohorts, they enjoyed substantially higher occupational pension provision than did the population of retired people over pension age.

In Table 2, six groups defined by gender and marital status are considered separately — married men (including cohabiting), unmarried men (including widowed, divorced and never married), married women (including cohabiting), 'existing' widows (i.e. widows at Wave 1), 'new' widows (i.e. those who become widows by Wave 2) and other unmarried women (divorced, separated and never married).

About 70 per cent of the married men had some income from an occupational pension in each wave, and coverage of state pensions was complete for them. Receipt of other benefits showed two offsetting trends, with entitlement to invalidity pension ending at age 70 but an increase in receipt of other disability-related benefits. Overall, their mean incomes rose modestly, and the median difference is also positive, so the majority saw their incomes rise. Median incomes in the second wave were, on the other hand, a little lower than median incomes in the first wave. This indicates a significant degree of reranking over the period.

This is illustrated by the fact that the median increase for those married men who began in the lowest quartile was £8 a week. The median increase for those in the second quartile was £3 a week. There was a median loss for those starting in quartile three of £3 a week, but a gain of £6 a week for those starting in the top quartile.

TABLE 2

'Retired Throughout' Group Already Over State Pension Age in 1988–89:<sup>a</sup>
Pre-Tax Incomes in 1988–89 and 1994, by Gender and 1994 Marital Status

#### Men

Pounds per week

|                       | Married<br>(200 c |      | Unmarried men<br>(67 cases) |      |  |
|-----------------------|-------------------|------|-----------------------------|------|--|
|                       | 1988–89           | 1994 | 1988–89                     | 1994 |  |
| Earnings              | 5                 | 3    | 25                          | 0    |  |
| NI retirement pension | 59                | 72   | 56                          | 70   |  |
| Other state benefits  | 12                | 10   | 11                          | 7    |  |
| Occupational pension  | 64                | 67   | 38                          | 38   |  |
| Other income          | 26                | 21   | 23                          | 23   |  |
|                       |                   |      |                             |      |  |
| Total income          | 167               | 174  | 152                         | 138  |  |

#### Women

Pounds per week

|                       | Married Existing |        | New    |        | Other unmarried |        |            |      |
|-----------------------|------------------|--------|--------|--------|-----------------|--------|------------|------|
|                       | wor              | nen    | wid    | ows    | wid             | widows |            | nen  |
|                       | (380 c           | cases) | (163 ( | cases) | (75 c           | ases)  | (73 cases) |      |
|                       | 1988–            | 1994   | 1988–  | 1994   | 1988–           | 1994   | 1988–      | 1994 |
|                       | 89               |        | 89     |        | 89              |        | 89         |      |
| Earnings              | 3                | 0      | 2      | 0      | 1               | 0      | 1          | 0    |
| NI retirement pension | 27               | 37     | 54     | 62     | 31              | 67     | 56         | 63   |
| Other state benefits  | 3                | 4      | 8      | 9      | 5               | 9      | 4          | 5    |
| Occupational pension  | 7                | 7      | 19     | 22     | 5               | 30     | 49         | 47   |
| Other income          | 16               | 17     | 13     | 10     | 7               | 14     | 27         | 19   |
| Total income          | 55               | 66     | 96     | 103    | 49              | 121    | 137        | 134  |

<sup>&</sup>lt;sup>a</sup>Unless otherwise stated, this and following tables refer to men aged 65–69 and women aged 60–69 in 1988–89.

Overall, then, the picture is rather complex, with gains associated with higher social security benefits and some quite substantial losses associated with lower earnings and investment incomes. Mean occupational pension income rose and, while the median level fell somewhat, the median difference was nil, with the majority of changes clustered around zero. Changes in income from occupational pensions are discussed in more detail in Section V.

The smaller group of unmarried men experienced the largest fall in mean income of any group, but this just reflects their higher levels of earnings in the first wave — earnings that had largely been lost by the time they entered their 70s. Otherwise, their incomes were stable, though somewhat lower than those of their married counterparts. For men as a whole, the overall story is actually one of remarkable stability. As one would expect, there is a fall in the importance of earnings and a little shifting between different benefits, but average incomes from occupational pensions and other sources (mainly investment incomes) change very little.

For both groups of men and for the women, one result requires further explanation — the apparent growth of the level of retirement pension. Given that the pension is indexed in line with prices, this appears to be a surprising result. It arises from two things, for the retirement pension recorded here is made up of two main elements — the basic pension and the earnings-related pension (SERPS). The reason that average receipt of SERPS grows faster than prices is to do with an obscure feature of the system of 'contracting out' — the system that allows those with suitable occupational provision to pay lower National Insurance contributions in return for forgoing (most) rights to SERPS. In return, the occupational scheme has to promise to pay a 'guaranteed minimum pension' (GMP). The GMP that the scheme pays has only to be indexed to prices up to a maximum. The state picks up the rest of the indexation bill through SERPS payments. So, especially in periods of relatively high inflation such as that experienced in the period around 1990, the real value of SERPS payments to those who have been contracted out of SERPS will rise.

The second reason for the increase in the real level of retirement pension is just to do with the timing of uprating. The increase in the pension level recorded in the two waves of the survey depended on inflation from October 1987 to October 1992. Inflation in this period was higher than inflation in the period between December 1988 and January 1994 when the two surveys were carried out, which was used to uprate the 1988–89 figures to the same real terms as the 1994 figures. This difference in historic inflation levels and actual inflation might be an important determinant of short-term changes in the real living standards of poorer pensioners, especially in periods of high and variable inflation.<sup>5</sup>

Among women, the groups who were married in the first survey, and either remained married or were widowed in the mean time, had the lowest personal incomes. The personal incomes of those who were widowed between the surveys more than doubled, largely as a result of inheritance of their deceased spouse's state and private pension rights. Half inherited an occupational pension. Naturally, this sharp increase in total personal income is not a good guide to the

<sup>&</sup>lt;sup>5</sup>Beckerman (1979) discussed this issue in some depth when high inflation levels in the 1970s made this a particularly live issue.

change in the overall financial position of these women, since they will, in most cases, have lost significant income from their late husband. What happened to their income as a family unit is considered in Section IV.

Women who remained married also experienced some increase in their incomes as some started to receive a retirement pension based on their husband's contributions when he reached the age of 65. For women who were previously receiving very little state pension in their own right, this could represent a substantial increase. The access to private income of their own was limited; only one in five received any money from an occupational pension and, even then, half of them were receiving less than £22 per week from this source. Other than the increase in state pension receipts, other incomes of this group, too, were stable, a pattern repeated for the existing widows and other single women.

The final group is divided almost equally between the never-married, who tend to have higher incomes because they are unlikely to have interrupted work histories, and the divorced or separated. Each benefited from the over-indexation of the state pension, but in this case there are falls in earnings and private pensions. The result for mean other incomes (which shows a marked fall) is somewhat misleading, being mainly attributable to a small number of elderly single women whose investment income falls dramatically between the two waves. In fact, the *median* income (from all sources) shows a modest rise and the median difference is also positive.

All this demonstrates fairly clearly that, over the five-year period from 1988–89, the incomes, and especially the private incomes, of the retired men and women in the age-groups under consideration changed very little on average. The one not surprising exception is the group of women whose spouses died in the intervening period. This stability in the averages could, though, be hiding considerable individual movements — some people's incomes could be rising while others' are falling. The data allow us to investigate that possibility.

Table 3 shows the range of income changes for each type of person. Again, we are considering only those men aged 65–69 in 1988–89 and those women aged 60–69 in that year. There is a range of changes but, with the exception of the newly widowed, the changes are very much clustered around the plus or minus 10 per cent range. The larger proportional declines were most often caused by lower earnings as people stopped earning anything between the surveys, a reduction in investment income and under-indexation of occupational pensions. Large proportional increases were mainly driven by inheritance of deceased spouses' pensions for new widows, increased pension income for married women whose husbands reached 65 and increases in investment incomes for the other groups. Some of the bigger changes could, of course, arise from misreporting, but the general pattern seems consistent with what one might expect with no very large increases in state pensions and few in occupational pensions, for example. It is hard to know whether the large reported changes in

TABLE 3

Percentage of Gender and Marital Status Groups in 1994 whose Income Changed by Particular Proportions, for the 'Retired Throughout' Group Already Over State Pension Age in 1988–89<sup>a</sup>

|                |                |               |                  |                    |               | Per cent                    |
|----------------|----------------|---------------|------------------|--------------------|---------------|-----------------------------|
| Change         | Married<br>men | Single<br>men | Married<br>women | Existing<br>widows | New<br>widows | Other<br>unmarried<br>women |
| >-20%          | 12.1           | 10.8          | 12.2             | 8.5                | 1.2           | 10.0                        |
| -20% to $-10%$ | 8.7            | 6.6           | 5.7              | 6.8                | 1.4           | 3.2                         |
| -10% to $+10%$ | 48.0           | 48.5          | 33.0             | 56.2               | 4.6           | 57.4                        |
| 10% to 20%     | 11.9           | 14.4          | 10.9             | 9.0                | 4.3           | 10.9                        |
| >+20%          | 19.4           | 19.7          | 38.2             | 19.5               | 88.6          | 18.5                        |
| All            | 100.0          | 100.0         | 100.0            | 100.0              | 100.0         | 100.0                       |

<sup>a</sup>Column counts as in Table 2.

investment incomes are genuine, but this is at least an income source that one might expect to be volatile.

The other point to note, though, is that the bigger proportionate gains tended to occur among those who started towards the bottom of the income distribution. Table 4 shows the average income for each quintile of retired men over state pension age in 1988–89 and then in the second column the average income of that same group in 1994. (Incomes here exclude earnings so that we can concentrate on other forms of income which are not directly dependent on work decisions.) So the first row is telling us that the poorest group in 1988–89 had average incomes of about £68 a week, but that by 1994 their average income had risen to about £83, representing an increase of over a fifth in real terms.

TABLE 4

Mean Income (Excluding Earnings)
for Retired Men Over State Pension Age in 1988–89 and 1994, by 1988–89 quintile

|            |         | Pounds per week |
|------------|---------|-----------------|
|            | 1988–89 | 1994            |
| Quintile 1 | 68      | 83              |
| Quintile 2 | 83      | 93              |
| Quintile 3 | 109     | 120             |
| Quintile 4 | 165     | 166             |
| Quintile 5 | 344     | 346             |

Note: Quintiles are based on ranked 1988-89 income less earnings.

Moving up the 1988–89 income distribution, the gains between the two surveys grow smaller. Indeed, there is virtually no change for those in the top two quintiles. At the bottom end of the distribution, the gains were largely benefit-driven. About a third of the increase for the bottom quintile resulted from the over-indexation of state pensions which we have already mentioned; most of the rest was caused by individuals moving onto income support and disability-related benefits. The way in which this leads the incomes of the poorest group to make up ground on the rest of pensioners during retirement is surprising, and is not insignificant.

All of this work, of course, has been done looking at *individuals*' incomes. To get a handle on changing living standards, one might want to consider the incomes of couples together. In fact, Webb (1997) shows that looking at couples' incomes adds little to the story that we have told here and we do not pursue that angle further. However, there is one group for which looking at the change in incomes between the two surveys clearly does require us to consider joint incomes in the first survey, and that is those who became widows in the mean time.

#### IV. WIDOWS

The biggest changes in individual incomes occurred for those women who became widows. Clearly, to understand what is happening to their living standards, it is important to compare their post-widowhood incomes with the combined incomes of them and their spouse prior to his death. Widowhood has long been recognised as a frequent cause of, or precursor to, poverty. As Hurd (1990) observes, 'the transition to widowhood itself seems to induce poverty'. The work of Burkhauser, Holden and Feaster (1988), using the US Retirement History Survey, showed that this was not, by and large, associated with loss of husband's earnings as movement into poverty occurred even when the husband was already retired. They found poverty was particularly caused by a loss of social security income and pension rights. The loss of pension rights was especially dramatic since, at this time in the US, most husbands had pensions with no allowance for survivors' benefits.

Allowing us to be clear about what happens to incomes following widowhood in the UK is possibly one of the most useful aspects of the Retirement Survey dataset.<sup>6</sup>

Table 5 describes the incomes of those retired couples in 1988–89 in which the husband died by 1994 alongside the incomes of the surviving widows in 1994. It includes only those couples both of whom were retired in 1988–89, which means the sample is rather small (86 observations). This selection means that we ignore the group in which the husband was working immediately before

<sup>&</sup>lt;sup>6</sup>See Disney and Stears (1997) for a discussion of what happens to housing at the point of widowhood.

TABLE 5

Composition of Pre-Tax Benefit Unit Income in 1988–89 and 1994: New Widows (86 Cases)

|                       | Average receipt |      | Percentage receiving |      | Median non-zero |      |
|-----------------------|-----------------|------|----------------------|------|-----------------|------|
|                       | (£ p.           | w.)  | (%)                  |      | (£ p.w.)        |      |
|                       | 1988–89         | 1994 | 1988–89              | 1994 | 1988–89         | 1994 |
| Earnings              | 14              | 1    | 10                   | 8    | 41              | 2    |
| NI retirement pension | 68              | 66   | 83                   | 92   | 93              | 66   |
| NI widows' benefits   | 0               | 4    | 0                    | 8    | 0               | 65   |
| Other state benefits  | 24              | 6    | 39                   | 22   | 56              | 31   |
| Own occ. pension      | 49              | 7    | 64                   | 21   | 31              | 15   |
| Spouse's occ. pension | 0               | 27   | 0                    | 60   | 0               | 27   |
| Other income          | 19              | 16   | 69                   | 79   | 13              | 4    |
|                       |                 |      |                      |      |                 |      |
| Total income          | 175             | 127  | 100                  | 100  | 138             | 95   |

he died. Naturally, this is the group in which one might have expected the most dramatic falls in income to have occurred, but this is really an issue to do with movement from earned income being available to none being available rather than a change in income during retirement itself.

The family income falls considerably following the death of the husband — by nearly £50 per week on average. The most important cause is the loss of the husband's occupational pension. On average, this seems to have led to a loss of about £15 a week. Inheritance of a part of the husband's pension kept this loss down and the effects were less dramatic than was the case in the US.

While only about a fifth of widows had an occupational pension on the basis of their own contributions, about 60 per cent inherited some pension income. Even so, their overall average occupational pension receipt was just £34 per week. Of those receiving some inherited pension, the median receipt was only £27 per week, substantially less than the pensions of married men.

Receipt of inherited pension income has a major effect on living standards. New widows who inherited their deceased husband's pension saw their benefit unit income decline by £10 more per week than those who did not inherit any rights. However, because widows who inherited pension rights tended to be better off in the first place, this decline only represented a fall of 27 per cent

<sup>&</sup>lt;sup>7</sup>The proportion of new widows over state pension age in 1988–89 was lower, at 54 per cent, indicating that the younger new widows were more likely to inherit some pension. This is possible due to an improvement in inheritance rights over time, though the small number of observations rules out any firm conclusions.

TABLE 6

Private Incomes for Married Men who were Retired and Aged between 65 and 70 in 1988–89, by Whether or Not Survived to 1994

|                      |                             | Survivors       |                    | Those who died               |                 |                    |  |
|----------------------|-----------------------------|-----------------|--------------------|------------------------------|-----------------|--------------------|--|
|                      | (218 cases, average age 67) |                 |                    | (45 cases, average age 67.5) |                 |                    |  |
|                      | %<br>positive               | Overall<br>mean | Non-zero<br>median | %<br>positive                | Overall<br>mean | Non-zero<br>median |  |
| Occupational pension | 70%                         | £65             | £56                | 70%                          | £49             | £22                |  |
| Investment income    | 75%                         | £26             | £9                 | 69%                          | £12             | £6                 |  |
| All private income   | 91%                         | £90             | £51                | 84%                          | £63             | £23                |  |

compared with a decline of 35 per cent for those without inherited pension rights.<sup>8</sup>

The other main source of income loss for widows was social security benefits, and for those in this age-group the main loss was from their husband's invalidity benefits.

It is worth stressing, though, that, although benefit unit income fell for couples where the husband died between the surveys, this does not necessarily imply that living standards fell. A standard assumption used in setting benefit rates in the UK is that a single person requires 60 per cent of the income of a married couple in order to meet the same living standard. On this assumption, it could be argued that the widows shown in Table 5 are not worse off in 1994 than when they were members of a couple in 1988–89 since their income is, on average, greater than 60 per cent of its 1988–89 level.

The position of widows relative to the rest of the retired population is determined not just by the reduction in income suffered when their husband died, but also by the fact that they tended to come from poorer families in the first place. In other words, there is evidence of differential mortality, poorer husbands dying first. This can be seen directly in Table 6. Here, we have chosen the group of married men in 1988–89 who were retired and aged between 65 and 70. We have then compared two groups — those who survived between the surveys and those who died. The table considers only private sources of income — occupational pensions and income from investment — for the two groups.

The difference between the two groups is substantial. While there is no difference between the two groups in the proportion receiving some income from an occupational pension, the difference in average receipts is very big. Median non-zero receipt among survivors was £56 a week in 1988–89 as against just £22

<sup>&</sup>lt;sup>8</sup>New widows who inherited pension rights saw their median total gross income fall from £149 to £98 per week between 1988–89 and 1994. Those without inherited rights experienced a fall from £109 to £64 per week.

for the non-surviving group. Receipt from investment income was also much higher among the survivors. In this case, overall mean income for the survivors was twice that among those who died. The last row of the table shows results for the two sources of private income combined.

Note that the average ages of the two groups in 1988–89 were much the same — 67 for the survivors, 67.5 for those who died.

Even with the relatively small samples we are dealing with here, there is very clear evidence of differential mortality. Married men who died had substantially lower private incomes than those who survived. Other groups — single people and married women — have inadequate sample sizes to allow comparisons to be drawn among an adequately tightly defined sample.

#### V. PENSIONS

It is evident that occupational pensions form the most important component of non-state income for the retired population. For many, what happens to their occupational pension determines what happens to their income in retirement. For widows especially, the inheritance or otherwise of a spouse's pension is the key to their future living standards. Given its importance, rather little is known about the development of occupational pension income during retirement. We devote this section to using the Retirement Survey to consider this issue.

Coverage of occupational pensions varies by marital status and gender. As Table 7 indicates, gender and marital status are just about the most powerful predictors of the likelihood of having rights to an occupational pension. Among married men in 1994, 72 per cent are recorded either as being in receipt of some income from an occupational pension or as having rights that they will be able to draw in the future. While nearly three-quarters of married men have such rights, this is true of only one-quarter of married women. Almost the same proportion of widows have rights on the basis of their own contributions, but 52 per cent have inherited rights from their deceased spouse. There is also one group of women — the never-married — who are actually more likely to have an occupational pension than any group of men.

Among men in receipt, the mean pension was just under £100 a week in 1988–89 and just over £100 in 1994, with the median rising from £62 to £71 over the same period. Among the much smaller proportion of women in receipt of a pension, the average levels were also substantially lower, with the mean rising from £44 to £48 and the median moving from £28 to £31. In common with other studies, we also find that the recipients under state pension age — the

<sup>&</sup>lt;sup>9</sup>As Stears (1997) shows, previous occupational class, for example, makes very little difference to the probability of men having an occupational pension, though for women this is much more important. <sup>10</sup>All in January 1996 prices.

<sup>&</sup>lt;sup>11</sup>Johnson, Dilnot, Disney and Whitehouse (1992), for example.

TABLE 7

Percentage who Are Drawing Now or Will Draw in the Future an Occupational Pension, by Marital Status in 1994<sup>b</sup> (Aged 60–75 in 1994)

|                            | Cell size | Percentage with an occupational pension |
|----------------------------|-----------|---|
| Married men <sup>c</sup>   | 807       | 72.0%                                   |
| Married women <sup>c</sup> | 724       | 24.8%                                   |
| Single men <sup>d</sup>    | 220       | 61.0%                                   |
| Never-married women        | 74        | 80.0%                                   |
| Widowed women              | 352       | 24.6%                                   |
| Divorced women             | 70        | 45.0%                                   |
| All                        | 2,247     | 47.7%                                   |

<sup>&</sup>lt;sup>a</sup> Own occupational pensions only — survivors' benefits are not included.

early retirers — typically have the highest pension levels. For men in 1994, the median pension among recipients aged between 60 and 64 was £102 a week compared with a median of £60 a week for the 65- to 69-year-old group.

The most important new information that can be gleaned from the Retirement Survey is to do with pension dynamics. It is possible from other sources (National Association of Pension Funds (1996) or Government Actuary's Department (1994), for example) to get some handle on the range of indexation procedures in the rules of various occupational schemes; but it has not, until now, been possible to look at this issue from the point of view of a representative sample of retired households.

The impossibility of doing such an exercise with cross-section data is further illustrated by this first observation: poorer recipients with smaller pensions were more likely to die between the surveys. For example, among men aged 65–69 in the first survey who died between the surveys, non-zero median receipt was £31 per week in 1988–89. For those surviving, the comparable figure was £49. The comparable figures for 65- to 69-year-old women pension recipients were £19 for those who died and £29 for the others. Any work comparing cross-sections over time will find it virtually impossible to separate out these differential mortality effects from actual pension level changes (Johnson and Stears, 1998).

The most direct evidence regarding what happened to pension receipt between the surveys comes from a comparison between pension levels at each

<sup>&</sup>lt;sup>b</sup>Marital status is more likely to be important for women than for men which is why we divide women's marital status into more categories.

cIncludes cohabiting.

<sup>&</sup>lt;sup>d</sup>Includes never-married, widowers and divorcees.

TABLE 8

Changes in Occupational Pension Income between the Surveys

| Change in occupational income          | All   |
|--|-------|
| Fallen by more than 20%                | 12.1% |
| Fallen by between 10% and 20%          | 8.7%  |
| Fallen by between 5% and 10%           | 8.9%  |
| Increased or decreased by less than 5% | 42.2% |
| Risen by between 5% and 10%            | 12.5% |
| Risen by between 10% and 20%           | 7.2%  |
| Risen by more than 20%                 | 8.4%  |
|  |       |
| All                                    | 100%  |

Sample: 'Retired throughout' individuals with one pension in 1988-89 and 1994.

Note: Number of observations = 445.

point.<sup>12</sup> As Table 8, shows there was a diverse range of experiences. While over 40 per cent of people saw little or no change in their real pension levels — indicating full price indexation of the pension — a fifth saw significant falls and some even saw increases.

This diversity of experiences reflects the variety of rules for uprating occupational pensions. Most public sector employees' pensions, which account for around 40 per cent of occupational pensions (Government Actuary's Department, 1994), are uprated in line with prices; the rules for uprating private sector pensions, on the other hand, are much more diverse. The majority of private sector regimes are either some fixed percentage increase or based on some proportion of the retail price index (RPI). Only 11 per cent of private sector schemes guarantee full price indexation, while nearly three-quarters of schemes would see real decreases in receipt if the RPI rose above 5 per cent, which did occur in the late 1980s and early 1990s.

The falls in pension income are, then, readily explained by under-indexation of pension benefits. The increases are harder to explain and might involve some apparent increases occurring because of the timing of indexation awards, or, of course, there is the possibility of some misreporting.

<sup>&</sup>lt;sup>12</sup>Respondents are also asked directly about whether their pension will increase during retirement, though no more details than that are asked. Stears (1997) shows that there are some discrepancies between these reported rules and what actually happened to pension levels.

 <sup>&</sup>lt;sup>13</sup>For more detailed information on private sector indexation rules, see Pension Law Review Committee (1993).
 <sup>14</sup>RPI for January to January: 1988–89 — 7.5%; 1989–90 — 7.7%; 1990–91 — 9.0%; 1991–92 — 4.1%; 1992–93 — 1.7%; 1993–94 — 2.5%. Source: *Economic Trends Annual Supplement 1996*.

#### Fiscal Studies

Tables 9 and 10 show that it is those who start off well-endowed who enjoy increases at least equal to the rate of inflation. Those from higher occupational classes are much more likely than previous manual workers to have inflation-equalling increases. Around three-quarters of professional and skilled non-manual workers get increases at least in line with inflation, compared with fewer than two-thirds of the manual workers. The less-skilled manual workers do particularly badly.

TABLE 9
Change in Occupational Pension Receipt between the Surveys, by Occupational Class

| Occupational class <sup>a</sup> | Number of cases | No change or<br>increased <sup>b</sup><br>(%) | Decreased <sup>c</sup><br>(%) |
|---------------------------------|-----------------|---|-------------------------------|
| Professional <sup>d</sup>       | 155             | 73.0  | 27.0                          |
| Skilled non-manual              | 95              | 82.0  | 18.0                          |
| Skilled manual                  | 104             | 65.4  | 34.8                          |
| Semi-skilled or unskilled       | 91              | 59.2  | 40.8                          |
| All                             | 445             | 70.3  | 29.7                          |

Sample: 'Retired throughout' individuals with one pension in 1988-89 and 1994.

 ${\bf TABLE~10}$  Change in Occupational Pension Receipt between the Surveys, by Initial Receipt

| Receipt in 1988–89 | Number of cases | No change or<br>increased <sup>a</sup> | Decreased <sup>b</sup><br>(%) |
|--------------------|-----------------|--|-------------------------------|
|                    |                 | (%)                                    | , ,                           |
| <£20               | 116             | 63.2                                   | 36.9                          |
| £20–£40            | 86              | 59.2                                   | 40.9                          |
| £40-£100           | 114             | 79.6                                   | 20.3                          |
| £100+              | 129             | 75.9                                   | 24.2                          |
|                    |                 |  |                               |
| All                | 445             | 70.3                                   | 29.7                          |

Sample: 'Retired throughout' individuals with one pension in 1988-89 and 1994.

<sup>&</sup>lt;sup>a</sup>Based on last job recorded.

<sup>&</sup>lt;sup>b</sup>'No change' is defined as occupational pension receipt changing by less than 5 per cent between the surveys, while 'increased' is a growth of more than 5 per cent.

<sup>&#</sup>x27;Decreased' is a reduction of more than 5 per cent.

Includes intermediate.

<sup>&</sup>lt;sup>a</sup> 'No change' is defined as occupational pension receipt changing by less than 5 per cent between the surveys, while 'increased' is a growth of more than 5 per cent.

<sup>&</sup>lt;sup>b</sup>'Decreased' is a reduction of more than 5 per cent.

Table 10 breaks the occupational-pension-receiving population down directly by amount of pension actually received at the time of the first survey. Those with small initial pensions were much more likely to suffer real falls than were those with higher pensions. Of those with initial pensions below £40 per week, between 35 and 40 per cent suffered real cuts. For those with higher pensions, this figure was nearer 20 to 25 per cent. One interesting outcome of this process would, other things equal, be an increasing level of inequality within cohorts as they age. In fact, this is not what we found when looking at incomes as a whole, and it appears that the effects of the disequalisation among occupational pensions is more than offset by the social security system improving incomes for the poorest.

### VI. CONCLUSIONS

This study confirms what little earlier evidence there was that pensioners' incomes tend, on average, to be quite stable, at least over a five-year period quite close to retirement, though a minority did experience quite significant income changes. The biggest changes were experienced, as might be expected, by those who were widowed. New widows on average experienced considerable growth in their individual income, mainly as a result of inherited pension rights, but a substantial decline in their family income. Whether the overall effect is for their living standards to fall is unclear. One finding, though, is that, even before the death of their husband, such people tended to live in relatively poorer households.

Further evidence of differential mortality was provided by the average occupational pension levels enjoyed by survivors and those who died. The survivors tended to have higher pensions. As far as could be observed, a majority of individuals had their pension indexed at least in line with inflation between the two surveys, but that experience was by no means universal. Those from lower occupational classes and with lower pension payments in the first place were more likely to suffer real cuts in the levels of their pensions in payment.

Looking at incomes as a whole, however, the opposite effect was evident. Those who were poorest in 1988–89 enjoyed bigger increases in incomes than did their richer contemporaries. This appeared largely to result from increasing incomes from social security.

## **APPENDIX**

TABLE A.1

Retired men under state pension age in 1988–89

|                       | Average receipt |      | Percentage receiving |       | Median non-zero |      |
|-----------------------|-----------------|------|----------------------|-------|-----------------|------|
|                       | (£ p.           | w.)  | (%)                  |       | (£ p.w.)        |      |
|                       | 1988–89         | 1994 | 1988–89              | 1994  | 1988–89         | 1994 |
| Earnings              | 16              | 9    | 12.9                 | 10.6  | 52              | 18   |
| NI retirement pension | 1               | 41   | 1.3                  | 56.5  | 62              | 68   |
| Other state benefits  | 44              | 39   | 54.2                 | 41.9  | 79              | 98   |
| Occupational pension  | 95              | 98   | 68.2                 | 74.2  | 112             | 95   |
| Other income          | 37              | 33   | 74.2                 | 74.3  | 24              | 11   |
|                       |                 |      |                      |       |                 |      |
| Total income          | 192             | 220  | 100.0                | 100.0 | 141             | 171  |

#### Retired women under state pension age in 1988-89

|                       | Average receipt (£ p.w.) |      | Percentage receiving (%) |      | Median non-zero<br>(£ p.w.) |      |
|-----------------------|--------------------------|------|--------------------------|------|-----------------------------|------|
|                       |                          |      |                          |      |                             |      |
|                       | 1988–89                  | 1994 | 1988–89                  | 1994 | 1988–89                     | 1994 |
| Earnings              | 6                        | 2    | 6.5                      | 6.0  | 20                          | 21   |
| NI retirement pension | 1                        | 33   | 1.7                      | 77.4 | 33                          | 36   |
| Other state benefits  | 20                       | 14   | 32.6                     | 26.2 | 63                          | 63   |
| Occupational pension  | 16                       | 20   | 26.1                     | 36.6 | 56                          | 39   |
| Other income          | 19                       | 23   | 69.3                     | 76.5 | 12                          | 17   |
|                       |                          |      |                          |      |                             |      |
| Total income          | 62                       | 93   | 84.5                     | 98.2 | 54                          | 71   |

Note: Strictly speaking, those below state pension age in 1988–89 could not have been receiving a state pension. However, for consistency, all ages in the 1988–89 survey are as at December 1988. If an individual was interviewed after that date, it is possible they could have begun to receive state pension even though they were under 65 in December. These few cases do not affect the overall picture.

## **REFERENCES**

Beckerman, W. (1979), 'The impact of income maintenance payments on poverty: 1975', *Economic Journal*, vol. 89, pp. 261–79.

Burkhauser, R., Holden, K. C. and Feaster, D. (1988), 'Incidence, timing and events associated with poverty: a dynamic view of poverty in retirement', *Journal of Gerontology*, vol. 43, no. 2, pp. S46–S52.

Disney, R., Grundy, E. and Johnson, P. (1997), *The Dynamics of Retirement: Analyses of the Retirement Surveys*, Department of Social Security Research Report no. 72, London: Stationery Office.

- and Stears, G. (1997), 'Housing wealth: distribution and transitions', in R. Disney, E. Grundy and P. Johnson (eds), *The Dynamics of Retirement*, Department of Social Security Research Report no. 72, London: Stationery Office.
- Government Actuary's Department (1994), Occupational Pension Schemes 1991, Ninth Survey by the Government Actuary, London: HMSO.
- Hurd, M. (1990), 'Research on the elderly: economic status, retirement and consumption and saving', *Journal of Economic Literature*, vol. 28, pp. 565–637.
- Jarvis, S. and Jenkins, S. P. (1997), 'Low income dynamics in 1990s Britain', *Fiscal Studies*, vol. 18, pp. 123–42.
- Johnson, P., Dilnot, A., Disney, R. and Whitehouse, E. (1992), *Income, Pensions, Earnings and Savings in the Third Age*, London: Carnegie Inquiry into the Third Age.
- and Stears, G. (1995), 'Pensioner income inequality', Fiscal Studies, vol. 16, no. 4, pp. 69–93.
- and (1998), 'Why are older pensioners poorer?', Oxford Bulletin of Economics and Statistics, forthcoming.
- National Association of Pension Funds (1996), *Annual Survey of Occupational Pension Schemes* 1996, London: NAPF.
- Pension Law Review Committee (1993), Pension Law Reform: The Report of the Pension Law Review Committee, vol. 1, London: HMSO.
- Radner, D. (1987), 'Money incomes of aged and nonaged family units 1967–84', *Social Security Bulletin*, vol. 50, no. 8, pp. 9–28.
- Stears, G. (1997), 'Occupational and other non-state pensions', in R. Disney, E. Grundy and P. Johnson (eds), *The Dynamics of Retirement*, Department of Social Security Research Report no. 72, London: Stationery Office.
- Webb, S. (1997), 'Income dynamics: evidence from the Retirement Survey', in R. Disney, E. Grundy and P. Johnson (eds), *The Dynamics of Retirement*, Department of Social Security Research Report no. 72, London: Stationery Office.