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Pensions and Labor-Market Participation in the United Kingdom

By RICHARD BLUNDELL AND PAUL JOHNSON*

Unlike most other European countries the United Kingdom's pension system is not well described by an analysis of the social-security element. For 30 years or more, around half the workforce has been covered by private occupational pensions. Something like half of the income of pensioners comes from non-social-security sources, and this proportion is growing. Of the workforce in the mid-1990's, 75 percent are "contracted out" of the second-tier State Earnings Related Pension Scheme (SERPS) into private occupational or personal pensions.¹ Partly as a result of these facts the United Kingdom also differs from many other countries in one other important respect: its state pension system is solvent. Tax rates necessary to pay for it are not predicted to rise despite the fact that the number of people over state retirement age is predicted to rise from 15.7 percent of the whole population to over 24 percent in 2050.²

In this paper we begin by describing the labor-market behavior of individuals around pension age. We also consider the coverage of the various parts of the social-security system. We go on to explain the structure of state pensions in the United Kingdom and compute the incentives for retirement that the structure creates, focusing on early retirement and the role of disability benefits, which are especially relevant for lower-skilled workers. We compare

these incentives with those facing workers with private occupational schemes who now make up the majority of older workers close to retirement. The structure of incentives is found to match well with the observed patterns of labor-market participation in the data.

I. The Labor-Market Behavior of Older Persons in the United Kingdom

The labor-market behavior of older persons in the United Kingdom has been characterized by a severe fall in the participation of men. The rate of participation among recent cohorts falls sharply below 80 percent after the age of 50 and declines rapidly thereafter. In contrast the secular rise in the participation of women has resulted in a small upward trend in participation among women in the 55–60 age bracket, with participation rates approaching those for men in that age group. The vast majority (80 percent or so) of men in their late forties are (full-time) workers. This proportion falls steadily, reaching 75 percent of those in their early fifties, dropping to 60 percent of those in their late fifties, with a sharp drop to 40 percent of 60-year-olds. This drops again to 30 percent by age 64 and then under 10 percent at 66. Hazard rates presented in Blundell and Johnson (1997) show a growing rate of exit for men beginning in their early fifties. For women the pattern is similar but with much lower full-time working and higher levels of part-time work. Work participation among women tails off quite rapidly for the 50-year-old women, falling from about 60 percent in the late forties to 30 percent in the late fifties and 20 percent at age 60. Given that the state pension becomes available at age 60 for women the increase in inactivity at that age is not surprising.

II. Key Features of the U.K. Pension and Social-Security System

It is hard to consider the U.K. state pension system in isolation from the private sector.

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¹ See Andrew Dilnot et al. (1994) for an overview of the U.K. pension system.

² These figures include the effect of the equalization of state pension age at 65 for men and women, a change that will be phased in between 2010 and 2020.

Among recently retired pensioners, private pensions make up almost half of total income in retirement, with the mean occupational pension payment (among those receiving some payment) approaching £90 (\$144) per week for a single person in 1996, which compares with a flat-rate basic state pension of £61.15 per week. This basic pension level represents just 16 percent of average male earnings. With indexation in line with the Retail Price Index its level relative to earnings is falling; it was 20 percent of the male average in the late 1970's.³

Although unrelated to earnings levels, the basic pension is nonetheless a "contributory" benefit, at least in principle. Entitlement to full benefit depends on contributions being made for 90 percent of a working life. These contributory conditions are not at all so onerous as they appear. Any time spent unemployed or sick/disabled attracts credits, which count in just the same way as contributions, and since 1978, time spent looking after children has reduced the effective number of years of contributions required through a system called Home Responsibilities Protection (HRP). Virtually all men aged 65 and over receive a full basic pension on the basis of their own contributions. The coverage of women currently over 60 is less comprehensive. However, these low rates of entitlement among married women reflect long periods spent out of the labor market by older cohorts. As a consequence of the increasing labor-market participation at younger ages and the home-responsibility rule, by the early years of the next century the vast majority of women will retire with entitlement to a full basic pension.

It is possible to defer pension receipt by up to five years. Deferral results in an increase in pension entitlement of 7.5 percent per year. This is more valuable to women than to men because of their higher life expectancy. Possibly as a result of this, 17 percent of female pensioners and 11 percent of males receive increments to their basic pensions as a result of deferral. Deferral is becoming less widespread

following the abolition, in 1989, of the "earnings rule," which effectively meant that those (women aged 60–64, and men 65–69) earning more than £75 per week (in 1989) had their pension entitlement severely reduced. The reduction was 50p for every £1 between £75 and £79 of earnings and £1 for every £1 thereafter. Virtually all those affected deferred their pension receipt rather than taking a reduced amount. Its importance is reflected in the fact that nearly a quarter of men and a third of women over age 80, with pension entitlement in their own right, have pension increments as a result of deferral. One might have expected the complete abolition of this rule to lead to significantly changed behavior among those in the relevant age ranges. In Blundell and Johnson (1997) we present new results based on earnings distributions in 1987–1988 and in 1991–1992 that support this hypothesis. There is clear evidence of bunching at the earnings-rule level in 1987–1988. There is no such peak in the later data.

Within the state welfare system itself, the most dramatic changes with respect to numbers receiving benefits have been in the number of pre-pension-age individuals receiving benefits initially designed for the long-term sick and disabled. The Incapacity Benefit (previously the Invalidity Benefit [IVB]) is the most important of these. It is a contributory benefit payable to long-term sick individuals who can show they are incapable of work due to illness or disablement and have been so for at least 28 weeks. Given that about a quarter of all men aged 60–64 (and nearly 20 percent aged 55–59) were in receipt of IVB in 1994, there can be little doubt that IVB has been used as an early-retirement vehicle.

The contributory basic benefit system was originally designed as a purely flat-rate arrangement intended only to provide a bare minimum income level. SERPS was introduced in 1978, with the intention that it would start paying out full benefits 20 years hence. The result of the introduction of SERPS, especially for the generation retiring in the years around 2000, will be to increase significantly the social-security income (and thus total income) of those without a private pension.

The retirement income of those in occupational pension schemes has been largely

³ James Banks et al. (1996) use these changes in replacement rates across cohorts to assess the consumption-smoothing hypothesis at retirement.

unaffected by the introduction of SERPS. Individuals in schemes that guarantee a certain level of benefit can give up rights to SERPS and pay lower National Insurance contributions as a result. Since 1988, not only have traditional final-salary occupational pensions been able to contract out, but so also have group money-purchase and personal-pension schemes. So now about three-quarters of eligible workers (i.e., those earning more than a lower earnings limit set for SERPS contributions) are not covered directly by SERPS. Half are in occupational schemes, and another quarter are in personal pensions.⁴

III. Retirement Incentives in the State System

In this section we consider the retirement incentives within the U.K. social-security system. The analysis reveals a number of interesting features of the U.K. retirement-benefit system. In particular it demonstrates the role of benefits available before state pension age. In our simulations we consider the incentives facing a married man born in 1930 and so reaching state retirement age of 65 in 1995. We consider two scenarios: the first ignores the impact of the invalidity benefit on early-retirement incentives, while the second incorporates this into the calculations. In each simulation we compute the amount of earnings-related and basic pension to which the individual would be entitled in the first and subsequent years of retirement. Blundell and Johnson (1997) provides specific details and simulations for a number of other scenarios. Given life tables and an assumed discount rate (3 percent), we calculate an expected net present discounted value of social-security wealth, SSW.

For the first scenario, in each year up to age 65 the accrual of SSW is slightly negative. Net SSW conditional upon retiring at age 65 is about £2,000 less than that conditional on retiring at age 55. This difference is small. It reflects two features of the U.K. system. Until age 65 the individual will be paying 10 percent

of his earnings in contributions each year, and his employer will be paying an additional 10 percent. So the cost to working an extra year is substantial (we use observed median earnings). The benefit of working an extra year, in terms of SSW, comes through extra earnings-related SERPS being accrued. Basic pension entitlement, which makes up the greater part of the total state pension, is unaffected by extra years of work. The loss in net income to higher contributions is significant for each extra year of work but only adds on once. The extra amount of SERPS earned is small for each year but payable for many years, especially given the existence of a younger wife. These values come close to canceling each other out, but the negative effect of extra contributions is just the greater.

The impact of introducing the disability benefit is dramatic. Assume that the benefit is available at age 60; then each extra year of work means forgoing a full year's benefits with only a small future increase in SERPS as compensation. The effects of an extra year of work are to reduce SSW by about £8,000 per year. This is equivalent to a tax rate of more than 70 percent on the year's earnings and means a fall in SSW of around 10 percent or more for each year of work. The penalty for staying on in work can be great indeed. Moreover, to the extent that individuals are able to claim invalidity benefits before age 60 (or receive income support without a work test) these arguments extend backwards even further. Of 55–59-year-old men, nearly 20 percent in 1994 were receiving the Invalidity Benefit, a number that has doubled since the early 1980's. It is also the case that until the beginning of the 1990's SERPS additions were payable in respect of invalidity pensions as well as in respect of retirement pensions. For low earners the effects of being eligible for benefits are even more spectacular. (Those unable to qualify for IVB may be eligible for means-tested benefits at a similar level.) In sum, the potential incentives for older low-to-middle earners without private pensions to leave the labor market are very considerable.

These observations raise interesting issues about the structure of the U.K. benefit system and appear to fit rather well with the observed behavior of many older men. Put together with

⁴ Very few personal pensions have reached maturity. In the future, personal pensions will become much more important in this context (see Dilnot et al., 1994).

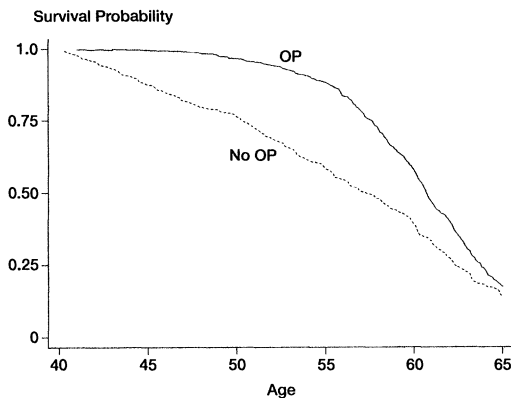


FIGURE 1. SURVIVAL FUNCTIONS FOR MEN
(PROBABILITY OF REMAINING IN EMPLOYMENT)

Note: OP = occupational pension.

the fall in demand for lower-skilled workers, the relative generosity of social security for older groups, especially through apparently easy access to the invalidity benefit, could well help explain much of the observed fall in participation rates among older less-skilled workers. Indeed there is some evidence for relatively elastic labor-supply behavior among older men in the United Kingdom (see the results using the U.K. Retirement Survey data in Costas Meghir and Edward Whitehouse [1997] and Richard Disney et al. [1994]).

IV. Retirement Incentives and Occupational Pensions

As we have stressed throughout, for a large part of the population, social-security pensions play only a secondary role in providing retirement income. In the private sector the standard occupational pension offers a pension equal to one-60th of final salary for each year of membership in the scheme. When early retirement is available it is often available on generous terms that clearly result in losing pension wealth by working longer. The only group for whom this is unlikely to be true are those who might expect substantial pay increases in the years approaching normal retirement age.

The differing nature of the rules governing occupational pension schemes and those governing state pensions clearly induce different

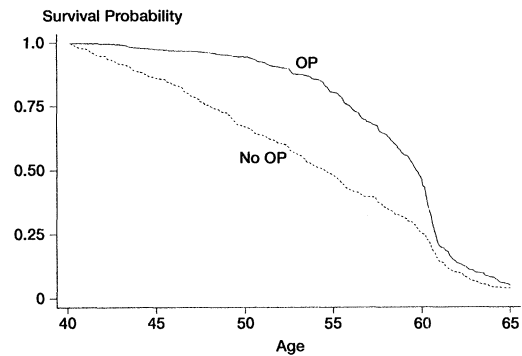


FIGURE 2. SURVIVAL FUNCTIONS FOR WOMEN
(PROBABILITY OF REMAINING IN EMPLOYMENT)

Note: OP = occupational pension.

incentives to retire before the standard retirement age. On becoming eligible, which typically occurs after age 55, the most obvious impact of occupational pension schemes operates through a wealth effect. Individuals eligible for early retirement are less likely to work when their pension income is higher. However, occupational pensions also may give an incentive to work longer since continued employment increases eventual pension entitlement, when pensions are typically linked to final earnings.

These differential incentives should show themselves in observed transition rates out of employment for those nearing retirement. To analyze this, Blundell and Johnson (1997) considers results from the U.K. Retirement Survey. This data source covers some 2,500 households in the age range 55–69.⁵ Survival functions (i.e. the age-specific probability of remaining in employment) for men and women are presented in Figures 1 and 2. The labor-market experience of the two groups is shown to be profoundly different. These survival functions confirm the importance of the incentives provided by occupational pension schemes: the survival

⁵ It gives detailed employment and pension life histories. It is a retrospective work-history data set unique in the United Kingdom, which records all job spells for each individual in the household.

probability is considerably higher just before retirement benefits may become due (either “full” or early retirement), and thereafter the survival probability falls much more rapidly than that of those not covered by pension schemes. The differences in these survival-to-retirement functions are consistent with what we would expect given the different incentive structures.⁶ Those without an occupational pension tend to be less skilled and have not seen any increase in real wages. The incentives for retirement before age 55 for this group are greater than for those with an occupational pension, as is portrayed in Figures 1 and 2 (see Meghir and Whitehouse [1997] for detailed elasticity estimates). Those with occupational pensions start to be able to take attractive levels of pensions from age 55, and this is also clearly reflected in the survival rates.

V. Conclusions

There have been significant changes in labor-market behavior among older individuals in the United Kingdom since the 1970’s. Participation and activity rates, especially among men over age 55 have fallen dramatically. For those who can get invalidity benefits, who account for more than 40 percent of nonworking 60–64-year-olds, the system comes close to working as providing early-retirement benefits with no actuarial reduction. The relative generosity of these benefits and the incentives which they create, combined with the reduced demand for unskilled labor, play an important part in explaining the observed fall in labor-market participa-

tion. Among those with occupational pensions, significant increases in pension wealth have had an important effect on increased early retirement, as has the relatively generous treatment of early retirement by many occupational schemes. The retirement behavior of those individuals with occupational schemes has been shown to differ significantly from that of those without occupational pensions in ways that are consistent with the incentives underlying the different schemes.

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⁶ The differences will also, in part, reflect endogenous sorting by individuals.