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Disability Benefit Receipt and Reform: Reconciling Trends in the United Kingdom

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Abstract

The UK has enacted a number of reforms to the structure of disability benefits, which has made it a major case study for other countries thinking of reform. The introduction of Incapacity Benefit in 1995 coincided with a strong decline in disability benefit expenditure, reversing previous sharp increases. From 2008 the replacement of Incapacity Benefit with Employment and Support Allowance was intended to reduce spending further. We bring together administrative and survey data over the period and highlight key differences in receipt of disability benefits by age, sex and health. These disability benefit reforms and the trends in receipt are also put into the context of broader trends in health and employment by education and sex. We document a growing proportion of claimants in any age group with mental and behavioural disorders as their principal health condition. We also show the decline in the number of older working age men receiving disability benefits to have been partially offset by growth in the number of younger women receiving these benefits. We speculate on the impact of disability reforms on employment.

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In the United Kingdom, public spending on total disability benefits rose steadily from about 0.4 percent of national income in 1950 to about 0.9 percent of national income in the 1980s. This was a period of no reform, other than a reform of the benefit rate structure in 1971. Subsequently, as shown in Figure 1, total spending on disability benefits then increased sharply over the first half of the 1990s, reaching 1.6 percent of national income in 1995–96. Concern with this spending finally triggered a major reform of the UK disability system that came into effect in that same year. As a direct result, spending on disability benefits fell both in real terms and as a share of national income. Further reforms took place over the 2000s and UK public spending on disability benefits has continued to fall: Public spending forecasts for these disability benefits in 2018–19 project it to be at its lowest level as a share of national income since the late 1960s.

Despite these falls in public spending on disability benefits since the mid 1990s, the numbers in receipt remains high by historical standards. At the end of 2013, 2.3 million individuals in Great Britain were receiving disability benefits and, while this was lower than the 2.5 million recipients of these benefits in 1995, this is still higher than any year prior to the mid-1990s and more than twice the level seen in any year in the 1970s or the first half of the 1980s.² In particular while the period since the mid-1990s has seen a decline in the number of men aged between 50 and 64 receiving disability benefits (from 1.1 million in 1996 to 0.6 million in 2013) the number of women aged between 16 and 59 receiving these benefits has grown (from 0.8 million to 1.0 million). These trends mean that the last government's aspiration to reduce the number of disability benefit claimants by one million over the decade starting in 2006 (Department for Work and Pensions, 2006) looks likely to be missed by some considerable distance.

² Source: Department for Work and Pensions admin data for data from February 2001 to November 2013 inclusive, Data from 1971 to 1998 taken from Anyadike-Danes and McVicar (2008)

This paper analyzes these and other trends in UK disability recipients and payments trends, using administrative data sources alongside an analysis of newly available household survey data, and places the trends in the context of the major reforms that have been implemented over the period from 1971 to the present time.³

The analysis in this paper is descriptive in nature and some of the earlier trends are documented in previous studies (for example, Disney and Webb 1991; Anyadike-Danes and McVicar 2008). However this paper makes a contribution in the following three ways.

First, it brings together all available data over the longest possible time period into a single set of evidence focused on the key trends in disability benefit receipt. For example, by combining data on age, education and benefit receipt we can see that, by the end of our sample period in 2013, low education 25-34 year olds were twice as likely to be on disability benefits than the highest education 55-64 year olds.

Second, to our knowledge this paper is the first to examine recent trends in receipt of disability benefits by health status, in particular we use administrative data that are available back to 1999 and survey data on those aged 50 and over containing an objective measure of health and disability from 2002 onwards. For example, among both men and women there is systematic growth in the proportion of claimants in any age group with mental and behavioural disorders as their principal health condition, posing an increasingly central issue for future disability policy reform.

Third, this paper is the first to our knowledge that documents the recent trends in receipt of disability benefits over the period in which the most recent major UK reform is being implemented.

³ Note the differing geographical coverage of the data that are available to us. Administrative data from the Department for Work and Pensions relate to Great Britain (i.e. not including Northern Ireland) and the LFS data cover the whole of the United Kingdom. ELSA data on the other hand, cover England which has, on average, slightly lower rates of disability benefit receipt than the rest of the UK.

It seems clear that in the absence of the various reforms discussed here, the numbers receiving disability benefits in the UK – and the amount spent publicly on them – would, have ended up being substantially higher. But the changes in receipt of disability benefits are far from uniform across divisions of age, sex, education, and health.

The UK Disability Reforms

The main UK disability payment program has changed name over time. In 1971, it was referred to as *Invalidity Benefit*. The reforms of 1995 changed this to *Incapacity Benefit*. In 2006, the “pathways-to-work scheme” was introduced, which led to the replacement of Incapacity Benefit with the *Employment and Support Allowance* in 2008. This section provides some key details of these benefits and the relevant reforms; for a more detailed discussion, see Banks, Blundell, Bozio and Emmerson (2012).⁴ These benefits are intended for those whose health means that they are not currently able to carry out paid work. While individuals do need to have made a contribution to disability insurance through a payroll tax in order to be eligible for benefits, the link from the amount paid to the disability benefits received is weak: generally speaking, the disability payments are flat-rate (regardless of the level of previous earnings) and those with low family incomes can qualify for a means-tested benefit of the same value without having made any earlier contribution.

The value of UK disability benefits, relative to earnings, peaked in the late 1970s at around 25 percent of average earnings (across all workers), which is a lower level of earnings replacement than provided by disability benefits in the Netherlands, Spain or the United States (Wise 2014). Since the early 1980s, UK disability benefits have been formally uprated in line with prices which has led to the value of these benefits falling to around 15 percent of

⁴ Other substantial reforms to disability benefits in the UK include: the introduction of Invalidity Benefit in 1971; the introduction of statutory sick pay in 1983; a tightening of the contribution requirements, an intended tightening of the health test (and renaming it the “Personal Capability Assessment”, PCA) and means-testing receipt of contributory Incapacity Benefit against an individual’s private pension income in 2000; and the time-limiting of receipt of contributory Employment and Support Allowance for those in the work-related activities group to one year in 2012.

average earnings (Banks, Emmerson and Tetlow 2014) since, at least until recently, average earnings in the UK have tended to rise in real terms over time. As a result, those with average or higher earnings in the UK receive little protection from publicly provided disability insurance, because the amount of disability benefit they might be able to receive is significantly lower than their current earnings.

When Invalidity Benefit was replaced with Incapacity Benefit (in 1995), the main difference was that the “suitable work test” (applied after 28 weeks of incapacity) was replaced with an “all work test.” This change meant that, for example, an individual who had been working as an economics professor would be assessed according to the ability of that period to do any kind of paid work rather than their ability to do work that might be considered appropriate for their skills and experience. In addition, this new medical screening was removed from the personal doctors of the workers and was instead administered by medical staff at the regional level, commissioned by the scheme’s administration. Finally, whereas previously those reaching the state pension age (which until April 2010 was age 65 for men and age 60 for women) could choose to continue receiving Invalidity Benefit for up to five more years instead of moving on their state pension this option was removed.

The effect of not allowing those reaching the state pension age to continue receiving disability benefits for up to five years (instead of the state pension) led to the number of men aged 65 to 69, and women aged 60 to 64, falling to (effectively) zero over the five years from 1995. It would be easy to overstate the reduction in public expenditure brought about by this reform, because the vast majority of these individuals would have instead received the state pension which for many would be payable at a similar amount.⁵

⁵ A similar interaction effect in reverse is seen as the female State pension age rose from 60 in April 2010 to 62 by May 2014, with 88,000 women aged 60 or over in receipts of disability benefits by the latter date. However, since the increasing state pension age has affected all women in the cohort and only a subset have moved onto disability benefits, the rise in the state pension age has led to a overall reduction in spending on state pensions greater than the increase in disability benefit payments and hence a net strengthening of the public finances (Cribb, Emmerson and Tetlow 2013).

While the 1995 reform had, for working age claimants, been focused on reducing the flow onto the benefit, a pair of reforms in the 2000s had the additional aim of increasing the flow off disability benefits. The “pathways-to-work” pilot programs, which began in October 2003, compelled disability benefit recipients to attend a set of interviews focused on how they might better manage their health condition in order to be able to return to paid work and provided them with an additional (time limited) financial incentive to move off disability benefits and into paid work. These pilot programs were initially aimed at those who had just moved onto the benefit, and the evaluation evidence suggested that the reform was effective at moving individuals off these benefits (Adam et al. 2008). The reforms were then extended nationwide and also applied to existing claimants, although the evidence on effectiveness from these extensions is more mixed (Bewley, Dorsett, and Ratto 2008; Bewley, Dorsett, and Sallis 2009).

From October 2008, Incapacity Benefit for new claimants was replaced by the Employment and Support Allowance (ESA). The health test for Employment and Support Allowance is intended to be stricter than the health test for Incapacity Benefit - the new “Work Capability Assessment” (WCA) splits successful claimants for disability benefit into those deemed to have “limited capacity to work and no ability to follow work related activities” and the remainder who have “limited capacity to work but are able to follow work related activities”. Claimants in the latter group are required to attend the (now nationwide) pathways-to-work programme and attend regular interviews with an advisor to discuss, for example, job goals and skill enhancement. In October 2010, reassessment of the stock of existing claimants of Incapacity Benefit began on a trial basis in order to move some to Employment and Support Allowance; the process was then rolled out nationwide starting in April 2011 (beginning with those with the shortest Incapacity Benefit durations and moving through to the longest) and was to be completed in 2014.

Disability Patterns Over Time by Age, Sex, and Reason: Evidence from Administrative Data

Against the background of these reforms in the last few decades, how have the patterns of those receiving disability benefits been evolving? As shown in Figure 2 the rate of disability benefit receipt is greater among older age groups than younger age groups, which is of course entirely unsurprising. Among men aged 50 and over, rates of disability benefit receipt peaked in the mid-1990s, with receipt among those aged 55 to 59 falling from 20 percent in the mid-1990s to just over 10 percent now, while receipt among those aged 60 to 64 fell even more sharply over the same period. While receipt of disability benefits among men aged 25 to 44 continued to rise after the 1995 reform, it rose less quickly than it had been prior to 1995. Similarly growth in rates of receipt of disability benefits among all age groups of women also clearly slowed after the 1995 reform.

The effect of the replacement of Incapacity Benefit with Employment and Support Allowance on rates of disability benefit receipt appears less clear. Receipt of disability benefits among men aged 35 to 49, and among women aged 50 to 59, appears to have begun falling during the period that Employment and Support Allowance has been rolled out nationwide (2011 to 2014), whereas prior to this receipt among these groups had been either flat or rising over time. One might have expected that these claim rates would increase during the recession, which this suggests that the most recent reforms have reduced the share of those receiving disability benefits – albeit to a much lesser extent than the 1995 reform.

While rates of receipt of disability benefits have been declining sharply for older men since 1995, and older women since 2008, the rate of receipt among these group still remain higher than among other groups. And when combined with the increasing size of this 'baby boom' cohort over the last twenty years, this means that there have not been large declines in

the absolute numbers receiving disability benefits. Administrative data show the number of claimants as 2.52 million in 1996, falling only to 2.29 million by 2013. But when looking at the probabilities of receipt by age, the patterns in Figure 2 suggest that that the numbers receiving disability benefits – and correspondingly the amount of public funding spent on them – would, in the absence of the 1995 and (to a lesser extent) subsequent reforms, have ended up being substantially higher.⁶

A final piece of evidence presented from administrative data is on the principal health condition that has led to the disability benefit claim, information on which is available from August 1999 onwards. The share of disability benefit claims that are for reasons relating to mental or behavioral health problems, by age group and sex, are shown in Figure 3. Since physical health problems become relatively more prevalent at older working ages, a higher proportion of the disability claims of younger men and women are for reasons relating to mental and behavioral disorders than among older men and women. The striking pattern is that, for all age and sex groups, a steadily increasing proportion of disability benefit claims are primarily for mental and behavioral reasons. For example among men aged 50 to 54 this increased from 24 percent in August 1999 to 42 percent in May 2014, while among women of the same age group this increased from 28 to 42 percent over the same period. If it seems unlikely that mental and behavioral disorders have become this much more prevalent over a relatively short time period then it would follow that individuals are becoming more likely to be deemed eligible for disability benefits on these grounds. Of course, to the extent this is not true this trend may suggest consequences for which different employer or occupational health adaptations are required to facilitate these individuals returning to paid work.

⁶ In addition, the fact that the 1995 reform essentially disqualified men and women above the State Pension Age from receiving benefits means it would have had an additional effect on the numbers on benefits even though this may not have been associated with reduced government spending for the reasons described above relating to substitution with state pension expenditures.

There are two other patterns in Figure 3 meriting some comment. Firstly, over the period 2010-2012 the proportion of disability benefit claims of men and women aged 25 to 34 that are primarily for mental and behavioural reasons stopped increasing. While this coincided with the national rollout of ESA to the stock of previous Invalidation Benefit claimants with the shortest benefit durations, growth in the proportion of recipients in this age range claiming for mental and behavioural reasons subsequently returned in 2013. Second, the gradient across age has, narrowed slightly over time for men, bringing it towards that observed among women, perhaps suggesting that the issues involved with getting disability benefit recipients back into paid work may not now be that different between men and women.

Education, Health and Disability: Evidence from Survey Data

The receipt of disability benefits, and the changes in receipt over time, do not just vary by age and sex. There are also important differences across subgroups defined by education and health status. Given the low rates of the benefit levels (now less than 15% of average earnings) replacement rates are substantially lower for those with high education than for those with low education and low earnings capacity one might expect different reactions to the benefit reforms from different groups. Similarly, the correlations between health, disability, education and wages, make it important that we investigate trends by health and education jointly.

Administrative data are not sufficiently detailed to document such differences, so in this section we turn to evidence from two household surveys: the Labour Force Survey (LFS) for data on disability by education, and the English Longitudinal Study of Ageing (ELSA) for data on disability by health and education status jointly.⁷

⁷ Prior to these dates the data available are more limited, either in terms of sample sizes within year-age-education cells or in terms of the nature and detail of the information collected on either benefit receipt or on health. However, some of these other data sources like the British Household Panel Study, the Family Expenditure Survey, and the Health Survey for England have been used to examine specific issues and

The LFS covers the full UK household population and samples an average of around 250,000 individuals between aged 25 and 59 (for women)/64 (for men) per year over the period 1998 to 2013. These data allows us to examine the extent to which, since 1998 at least, these trends in receipt of disability benefits have differed across low and high skilled individuals within each age group. In drawing this sample we excluded individuals aged below 25 since a non-negligible and endogenous fraction will still be in full-time education. We also excluded those at or above the State Pension Age or one year below it, i.e. women aged 59 and over and men aged 64 and over since they were not eligible for benefits over this sample period.

We define three education groups. The lowest education group are those that left full time education at or before the compulsory school leaving age (age 14 for those born before April 1933, age 15 for those born between April 1933 and April 1958, and age 16 otherwise). This represents a large fraction of the population, particularly in older cohorts.⁸ The remaining individuals are divided into a middle education group who chose some post-compulsory schooling but left school at or before age 19 and a high education group who continued full time education beyond age 19. The LFS data also contain standard and relatively high-quality measures of disability benefit receipt status.

Those with lower levels of education are more likely to claim disability, as one would expect, for several reasons. There is a well-documented relationship between lower levels of education and worse health. In the UK system, there is also the fact that the flat-rate structure of benefit rates, described above, means that disability benefits will replace a higher share of earnings for lower earning groups—thus making disability a substantially less attractive option for those with medium or higher education levels. While we do not present data on this

questions pertaining to disability benefits in earlier years. For example Disney, Emmerson and Wakefield (2006) use the BHPS to examine the importance of health in determining labour market transitions of working age individuals aged 50 and over.

⁸ The cohort with school leaving age of 14 are not actually observed below State Pension Age from 1998 onwards so do not feature in our analysis.

here, these differences are immediately apparent in the LFS data- within all age and sex subgroups, the low educated are roughly four times as likely to be in receipt of disability benefits than their high education counterparts.

In addition to this, patterns over the last few years in particular need to be interpreted with caution, because the recent recession is known to have affected education and sex subgroups differently. For example, the most recent recession involved a smaller fall in the proportion in paid work than in previous UK recessions and this difference was particularly striking for older better educated male workers (Blundell, Crawford and Jin 2014). With that caution duly noted, some patterns of disability across education and age levels still stand out.

While the reductions in rates of disability benefit receipt since the 1995 reform have come mainly from those for older men (as noted earlier), amongst this group the trend has been considerably more acute for the lower educated than for the higher educated. And across older men and women there appears to have been a differential trend in disability levels across education groups over the period 2010-2013, particularly for older women, whereby the probability of receipt has fallen particularly rapidly for the lowest educated older women and yet been relatively flat for more educated older groups and either flat or rising for the more educated younger groups. These differential trends are illustrated in Figure 4 which shows the stark differences in patterns for low education older groups in comparison to their younger counterparts. In addition, while we do not present a figure on this, the differential levels of disability across education levels have been widening in the last few years for those in the 25 to 44 year-old age brackets, particularly for women in the period post-2008 from when employment and the support allowance began to be introduced.

The combination of these patterns of disability across age and education groups over time, and in particular the sharp declines for the oldest age groups following the recent reforms, means that that for both men and women, by the end of our sample period in 2013,

low education 25-34 year olds are in fact more than twice as likely to be on disability benefits than the highest education 55-59/64 year olds.⁹ This pattern may be related to the fact, noted earlier, that for those with low earnings potential, the relative pay-off to work versus disability benefits will be lower, with this effect growing over time as benefits are updated with the price level (Banks, Emmerson, and Tetlow 2014).

As the differences in trends across education within the oldest age groups have been so stark, it is important to understand these in more detail, and in particular, their relationship with health and employment rates. For this purpose, we turn to data from the English Longitudinal Study of Ageing (ELSA), although this means that we can only focus on the older age groups. The first six waves of ELSA has been collecting highly detailed information on the health, functioning and socioeconomic status of around 11,000 individuals aged 50 and over in England since 2002. Individuals are interviewed every two years and additionally have a nurse assessment every four years; the resulting data encompass self-reported measures of disability, physical and cognitive performance tests, and many other detailed biomarker and self-reported health indicators, as well as the standardized questions on education and self-reported receipt of disability benefits we utilized from the LFS data.

The ELSA data would of course support a highly detailed modeling of the dynamics of disability and disability benefit entitlement, especially because of the longitudinal nature of the panel data and because many individuals have given consent for their data to be linked to their administrative benefit records. Here, however, we confine ourselves to constructing a simple index of health and disability, based on those disability conditions that are covered by the ELSA data and also assessed as part of the Work Capacity Assessment. The measures relate to physical disability (thus relating to walking, standing, sitting, manual dexterity, etc),

⁹ Running a simple logistic model of benefit receipt on age, sex and education by year, we find that, in 2013 those with high levels of education aged 50 to 59/64 are found to be half as likely to be in receipt of disability benefits than those with low levels of education aged 25 to 34 (Odds ratio 0.49 with a 95% confidence interval of 0.41 to 0.59) whereas in 1998 they were twice as likely (Odds ratio 2.15 with a 95% confidence interval of 1.81 to 2.56).

vision, incontinence, mental health and finally stress-related reasons for leaving past employment. In total there are 11 such items so we construct an index taking values 0-11, which simply counts the number of conditions with which each individual in the ELSA sample is observed.¹⁰

Having looked at the distribution of the index, and in order to keep our descriptive analysis as simple as possible, we then group the data into four disability categories: None (0 or 1 condition), mild (2 or 3 conditions), moderate (4 or 5 conditions), severe (6 or more). Other than for reasons of sample size our subsequent conclusions are not materially affected by using different groupings. The majority of individuals aged 50 to the state pension age have zero or one of the identified conditions, although the majority of low-education individuals have one or more. The distribution of the disability index and its co-variation with education is strikingly similar in both 2002 and 2012, although the data do show a slight reduction in the proportion of women with the highest values of the disability index over this time period.

While crude, the index still correlates strongly with the receipt of disability benefits, particularly for men: within the age group between 50 and the State Pension Age almost three-quarters of men with low education and severe disability (six or more conditions) in 2002 are observed to be receiving disability benefits. For a given level of the disability index, the probability of disability benefit receipt is greater for men than for women, perhaps unsurprising giving lower life-time labour market attachment for women in these cohorts, and greater for those with low levels of education than for those with high levels of education. Again, this may be related to the relatively low replacement rate of disability benefits for higher earners.

However, rates of receipt of disability benefits conditional on health status did change substantially between 2002 and 2012, as is also apparent in Table 1. Declines in benefit

¹⁰ More specifically, these conditions relate to various Activities of Daily Living (walking, sitting, standing, climbing stairs, lifting a weight, picking up a 5p coin etc.) as well as eyesight, incontinence and stress. Further details are available from the authors on request.

receipt are observed at all values of the index, with large absolute declines receipt rates in the groups with the worst level of disability, and large proportionate declines receipt rates for the least disabled. These trends are consistent with an improved targeting of the benefit onto those with more severe disabilities, although this improved targeting happened at different points of the disability distribution before and after the 2008 reform when the Employment and Support Allowance first began to replace Incapacity Benefit.

Figure 5 shows how the distribution of disability within the stock of benefit recipients has changed over the period 2002-2012 as a result of these changing rates of receipt conditional on health and the changing distribution of the health index more generally. All groups experienced a reduction in the proportion receiving disability benefits, but these reductions were much greater for some groups than for others.

Among women the proportion of benefit recipients with six or more indicated disabilities increases over the whole period from one-third to over one-half. In the most recent years, and subsequent to the Employment and Support Allowance reform, there is striking reduction in the proportion on benefits with zero or one conditions, falling from 15 to 4 percent over the four-year period 2008-2012. For men, the disability benefit appears less well targeted at the beginning of the period: 23 per cent of male benefit recipients in 2002 reported zero or one condition in the health index, compared to only 14 percent of women. After that time, there are no marked or consistent trends in the disability composition of the male benefit claimants. Thus, it seems that the substantial reduction in rates of disability receipt for older individuals documented in the previous analysis has been less driven by the best-health groups for men than it has been for women.

To conclude our analysis of these changes we compare trends in employment with these disability trends, both unconditionally and by education and health groups, which offer some tentative evidence relating to the question of substitution between disability benefit and

employment. The rules for receiving disability benefits offer only very limited possibilities to do any paid work at all (certain permitted work rules do allow benefit recipients to do a small amount of paid work each week while receiving benefits only if their Jobcentre Plus advisor agrees).¹¹ Thus, any trends toward lower claiming of disability benefits claiming that are not matched by trends in higher employment suggest either movements onto other welfare programs or else the use of other forms of support (family income, savings etc.) until the individual reaches the State Pension Age. This would also indicate a broad failure of the reforms if assessed with respect to the goal of moving people into paid work as opposed to simply reducing caseloads or government spending on disability benefit payments.

The broad trends in labor force participation in the United Kingdom (presented in Figure 6) are well-known, and similar to those in the United States. For example, there has been a steady increase in paid work for men of older working ages from the mid-1990s onwards, and steadily rising rates for women of all ages. At the aggregate level, it seems that there are at least some examples of broad correspondence in the patterns with receipt of disability. For example, the pick-up in male employment rates has been most apparent for the oldest ages where disability benefit rates have declined the most. In labor market trends for women, there is evidence of an upturn in the trend in employment for 55-59 year old women since 2010 (as the most recent reform was being implemented) at the same time as the sharp downturn in their benefit receipt rates. But separating the effects of general labor market trends (and, in the case of women, the particular experiences associated with the most recent post-recession period) from any effects due to disability or disability benefits is not straightforward, not least in the most recent years of data, and estimating a causal effect of benefit reform on employment rates is left for future work.

¹¹ In the ELSA data only a small fraction of those on benefits reporting having done any paid work in the previous month – around 0.3 percent of all males and 0.2 percent of all females over the period 2002-2013. These levels are small enough that they could largely be accounted for by measurement error in the survey.

As a final piece of descriptive evidence, however, we disaggregate these trends in receipt of disability further within the population 50 and over—specifically by education, sex and disability level—and focus just on the years since the Employment and Support Allowance first began to be introduced from 2008. We then examine whether the groups with greater or lesser movement off disability benefits since this reform has occurred have seen greater or lesser movements in to work. Table 2 shows the difference in benefit receipt rates between 2008 and 2012 for each of the three levels of disability, along with corresponding changes in employment and in receipt of Job Seekers Allowance (i.e. unemployment benefit), with these differences being expressed relative to changes in the group with zero or one conditions.¹² Thus, the group with a mild level of disability experienced, on average, a three percentage point relative decline in those receiving disability benefits. At the same time there was a small (0.7 percentage point) but insignificant decline in employment, and only a one percentage point rise in those receiving unemployment benefits (also statistically insignificant).

Taken together, the evidence in Table 2 does not provide strong evidence of effects of the ESA reform either on return to work, or on movements onto unemployment benefit. What evidence there is of substitution between these three forms of activity is strongest for the group with moderate but not severe disability, where we observe higher rates of employment and receipt of Job Seekers Allowance that can account for just under one quarter of the reduction in numbers on disability benefit. For those with the severest disabilities we observe a very large relative decline in the numbers on disability benefits (consistent with Table 1) but essential no change in the numbers either employed or receiving unemployment benefits.

¹² More specifically, for each variable in the table we express each observation relative to the mean of those with the same sex and education but without any disability.

Summary and Conclusions

The UK has had a number of reforms to the rates and structure of disability benefits that make it an interesting case study for other countries thinking of reforming their systems of support for those whose health means they are unable to work. In this paper we have documented recent reforms and examined the evidence on trends in the numbers and characteristics of those receiving such benefits over the period since 1971. What lessons can we draw from this exercise?

First, the UK experience demonstrates that at least in time periods after disability benefits have spiked upward, reforms concerning eligibility for such benefits can reduce disability benefit levels from the levels they otherwise would have reached. Given large demographic shifts in cohort size this is not always apparent when considering raw numbers of claimants.

Second, when calculating potential cost savings from disability reforms, it is important not to consider a single program in isolation. In the UK, most of the reduction in spending on disability benefits among those aged over the state pension age as a result of the 1995 reform resulted in higher state pension spending. Similar interaction effects will be important when thinking how means-tested benefits will rise if the number of working-age adults receiving disability is reduced.

Third, perhaps as a result of the low and declining levels of UK disability benefit in monetary terms, receipt has now become even more closely related to education level than in the past. For example, by the end of our sample period in 2013, low education 25-34 year olds are now twice as likely to be on disability benefits than the highest education 55-64 year olds.

Fourth, as a greater share of women enter the labor force, a greater share are eligible for, and receiving, disability benefits. The decline in the number of older working age men receiving disability benefits has been partially offset by growth in the number of younger

women receiving these benefits. But disability patterns by health and education status are not the same for men and women. The substantial reduction in rates of disability receipt for older individuals documented in recent years has been less driven by a decline among the best-health groups for men than it has been for women. For a given level of reported health status, men are more likely to receive disability benefits than women.

Fifth, there is systematic growth over time in the proportion of claimants in any age and sex group with mental and behavioral disorders as their principal health condition, and the inflow and outflow of this group to disability benefits raises prominent issues for future disability (and employment) policy.

Finally, the evidence with regard to movements back to employment is mixed. While the period of decline in benefit receipt since 1995 has also been one of increasing employment amongst older age groups it is not easy to disentangle any effects from broader labour market trends given the limited microdata on health, education and employment over this time and the nature of the reforms that occurred. Looking tentatively at the more recent ESA reform on older adults, and using its differential impact on groups with differing levels of education and disability, we do not find strong evidence of substitution between disability benefit and unemployment benefits over the period of the most recent reforms, nor do we find strong evidence of any return to work effects. But our analysis has only been very limited, both in its scope and its statistical power, given the relative recency of the reform and the fact that we do not have much data in the post-reform period. Indeed, given the way the programme has been rolled out it is somewhat challenging to think of a more concrete evaluation of these potential substitution effects with the data available until we have a larger sample of those observed with an onset of disability and a (potential) movement from work onto the new benefit. Such an analysis is left as a topic for future research, but the descriptive evidence presented here on how the ESA reform has had differential impacts on benefit receipt for groups defined by age,

sex, education and disability level, suggests that such research may be fruitful in enhancing our understanding of the full effects of disability benefit reform and indeed in informing other countries with regard to the potential effects of any future reform.

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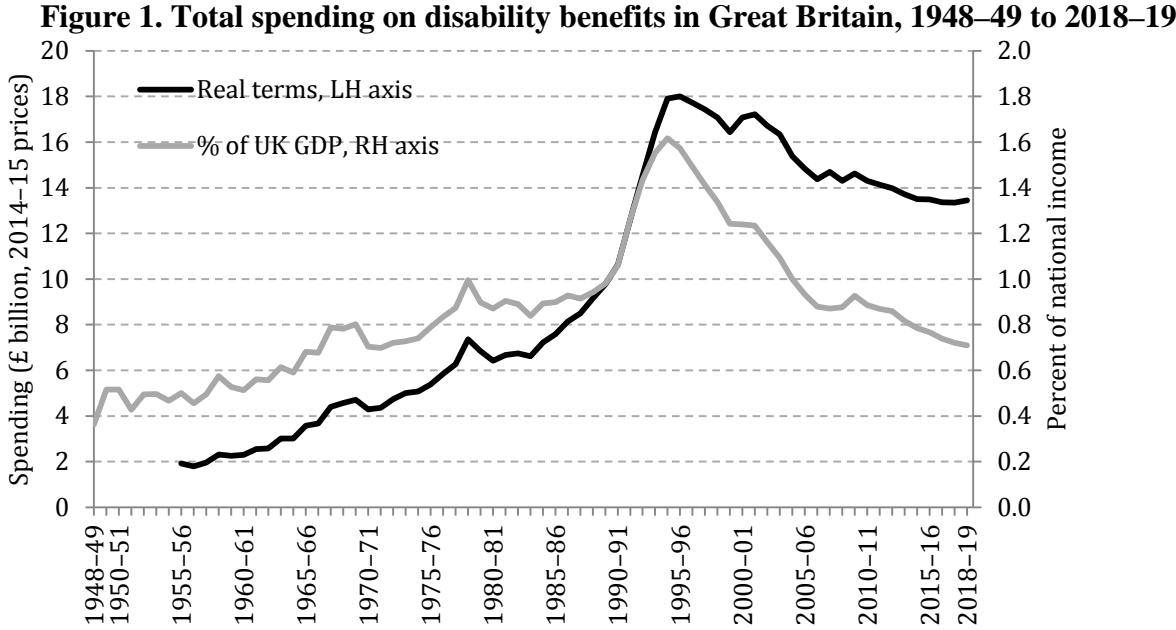
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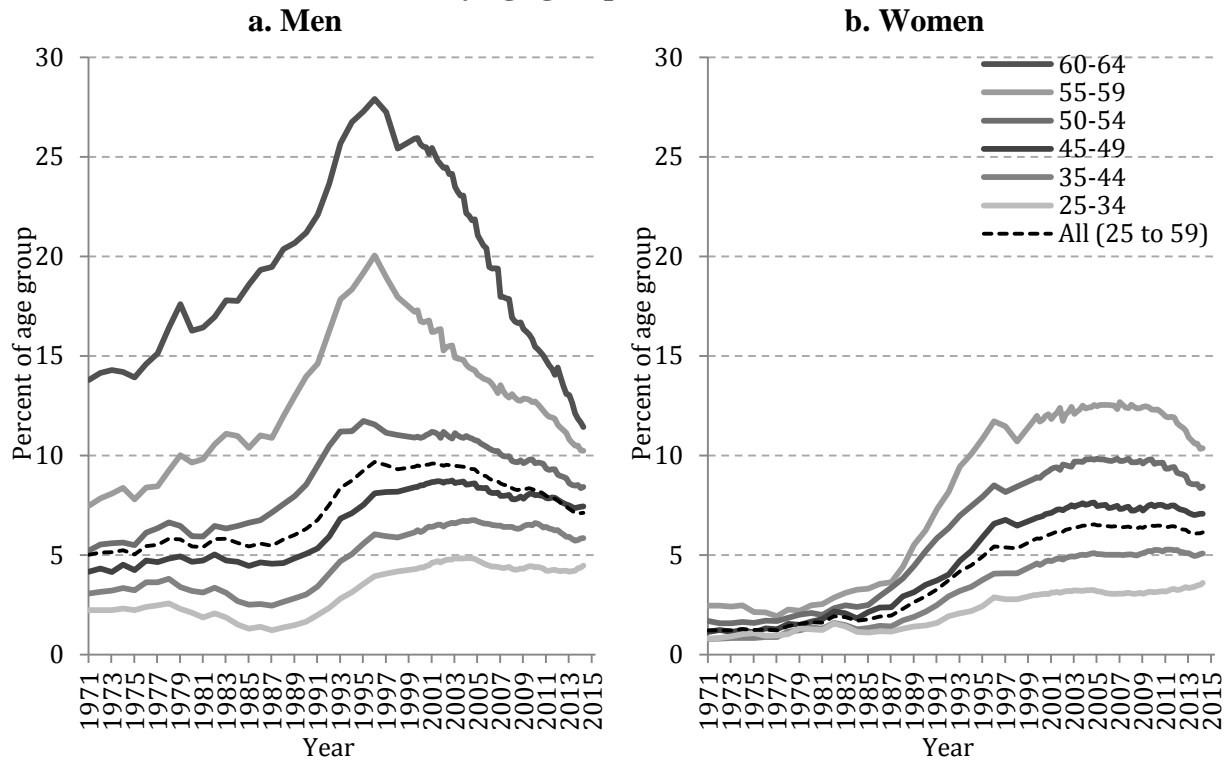
James Banks, Richard Blundell and Carl Emmerson
 March 2015

Figures and Tables



Note: Figure shows spending on sickness benefit, Invalidity Benefit, severe disablement allowance, income support on grounds of disability, Incapacity Benefit and Employment and Support Allowance.
 Source: Department for Work and Pensions, Benefit Expenditure and Caseload Tables, March 2014
<https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2014>

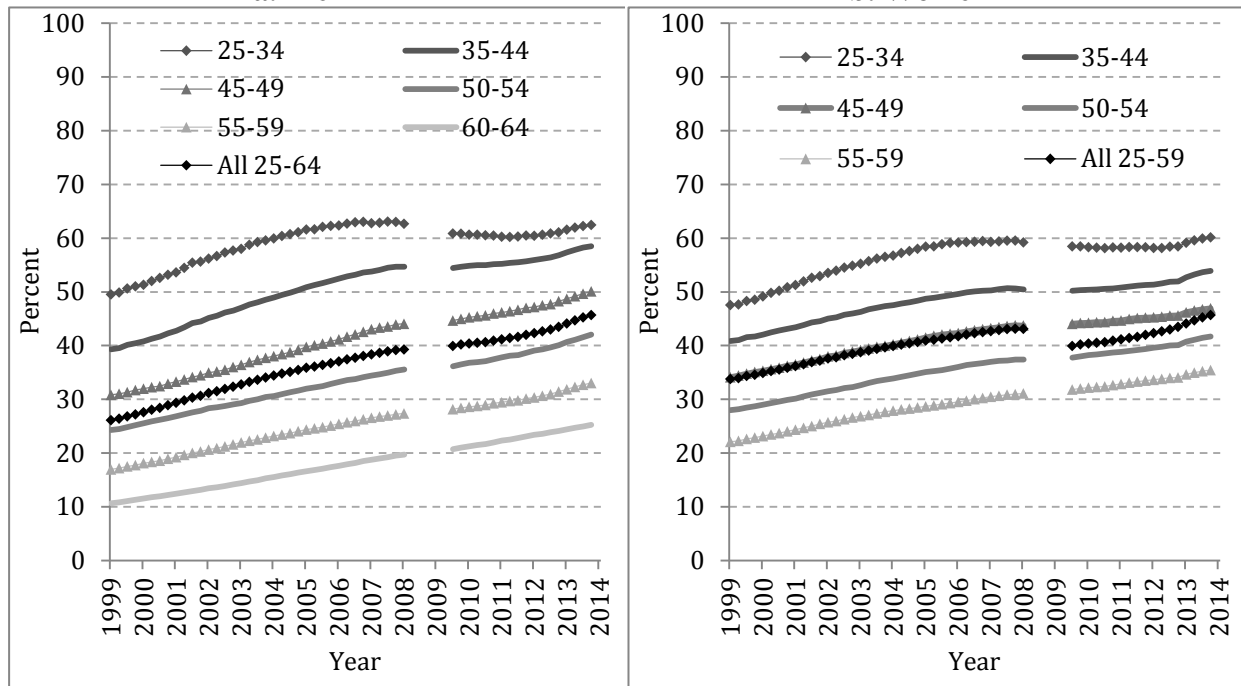
Figure 2. Disability benefit claimant rates of men aged 25 to 64, by age group, 1971 to 2014



Notes: Claimants of Invalidity Benefit, Incapacity Benefit and Employment and Support Allowance in Great Britain. No data are shown for women aged 60 to 64 since age 60 was the state pension age for women for most of this period. For comparability the all category for both men and women is shown for those aged 25 to 59.

Sources: Authors' calculations using data from the Department for Work and Pensions tabulation tool (<http://tabulation-tool.dwp.gov.uk/100pc/tabtool.html>, accessed on 14 November 2014), for data from August 1999 to May 2014 (inclusive). Data from 1971 to 1998 taken from Anyadike-Danes and McVicar (2008). Population estimates (to 2012) and projections (for 2013) by age taken from the Office for National Statistics.

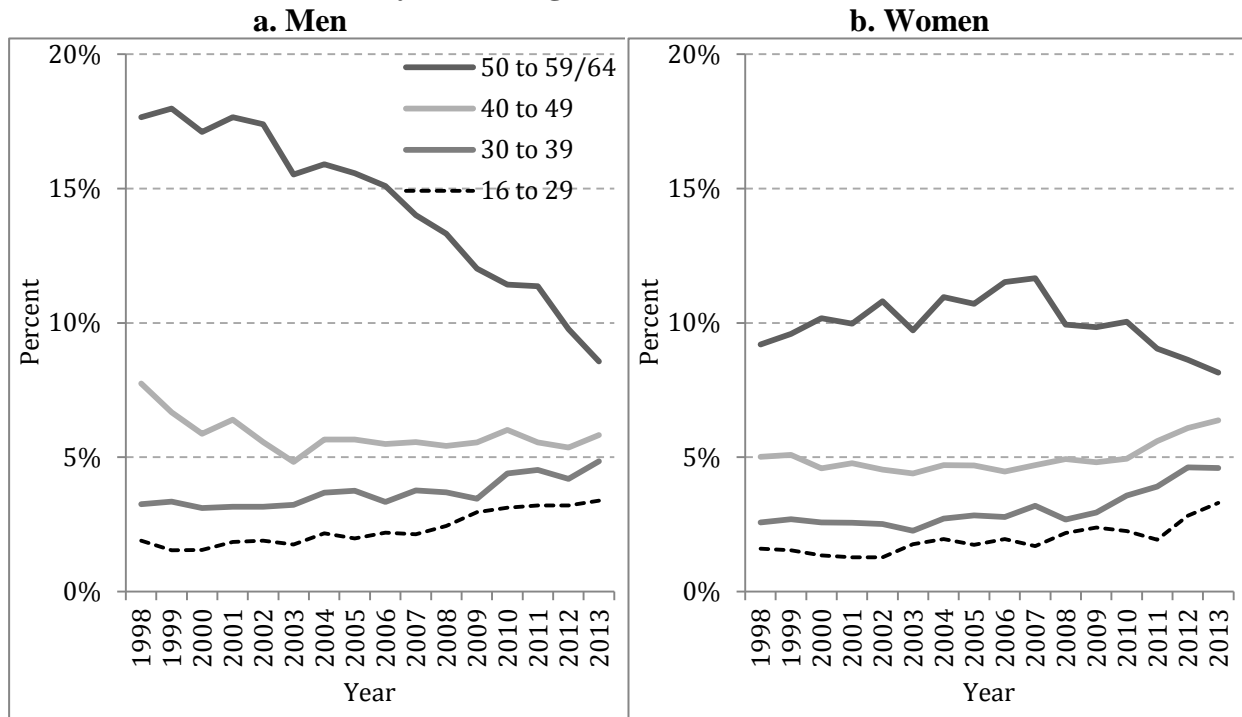
Figure 3. Per cent of disability benefit claims due to mental and behavioural disorders, by sex and age group, August 1999 to May 2014
a. Men **b. Women**



Notes: Claimants of Incapacity Benefit and Employment and Support Allowance in Great Britain. Data from November 2008 to November 2009 (inclusive) are missing as the summary disease code for those receiving Employment and Support Allowance are not available over this period. Figure shows men aged 25 to 64 and women aged 25 to 59 since ages 65 and 60 were the state pension ages for men and women respectively for most of this period.

Sources: Authors' calculations using data from the Department for Work and Pensions tabulation tool (<http://tabulation-tool.dwp.gov.uk/100pc/tabtool.html>, accessed on 21 November 2014).

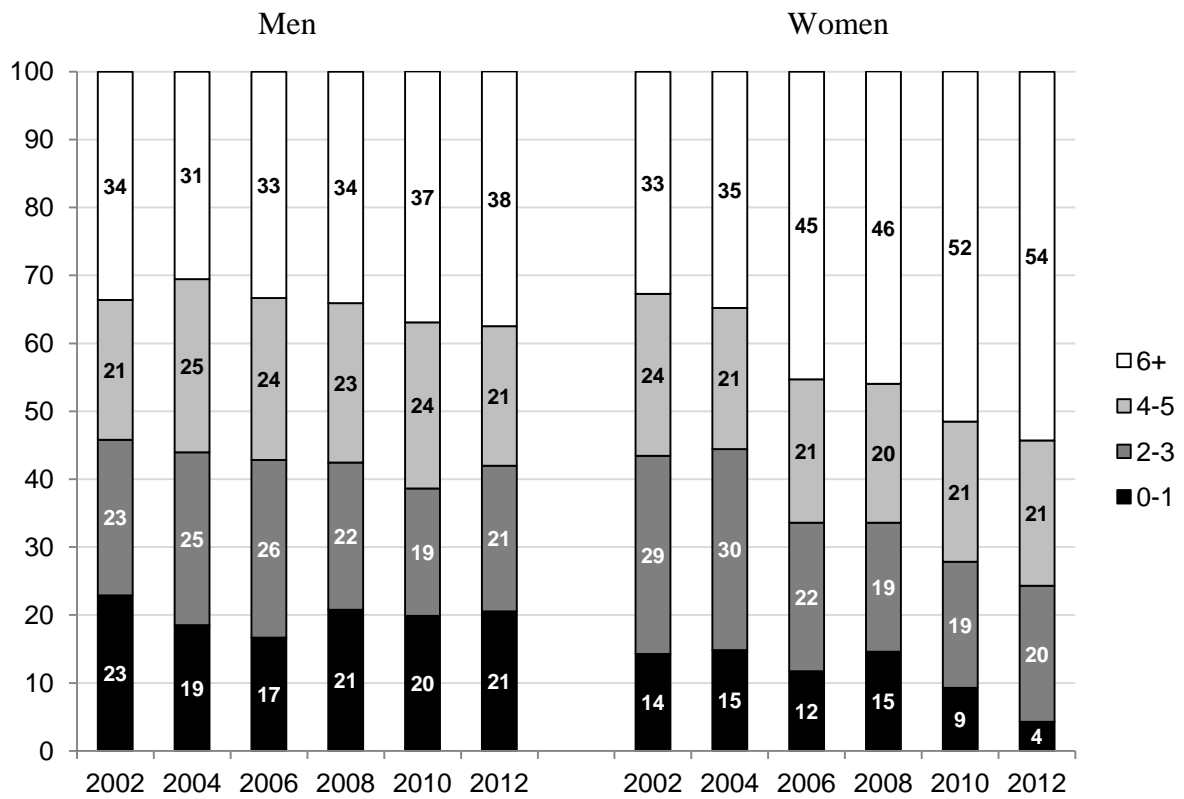
Figure 4: Receipt of disability benefits among those with a low level of education, by sex and age band, 1998 to 2013



Notes: Claimants of Incapacity Benefit and Employment and Support Allowance. Figure shows men up to age 64 and women up to age 59 since ages 65 and 60 were the state pension ages for men and women respectively for most of this period.

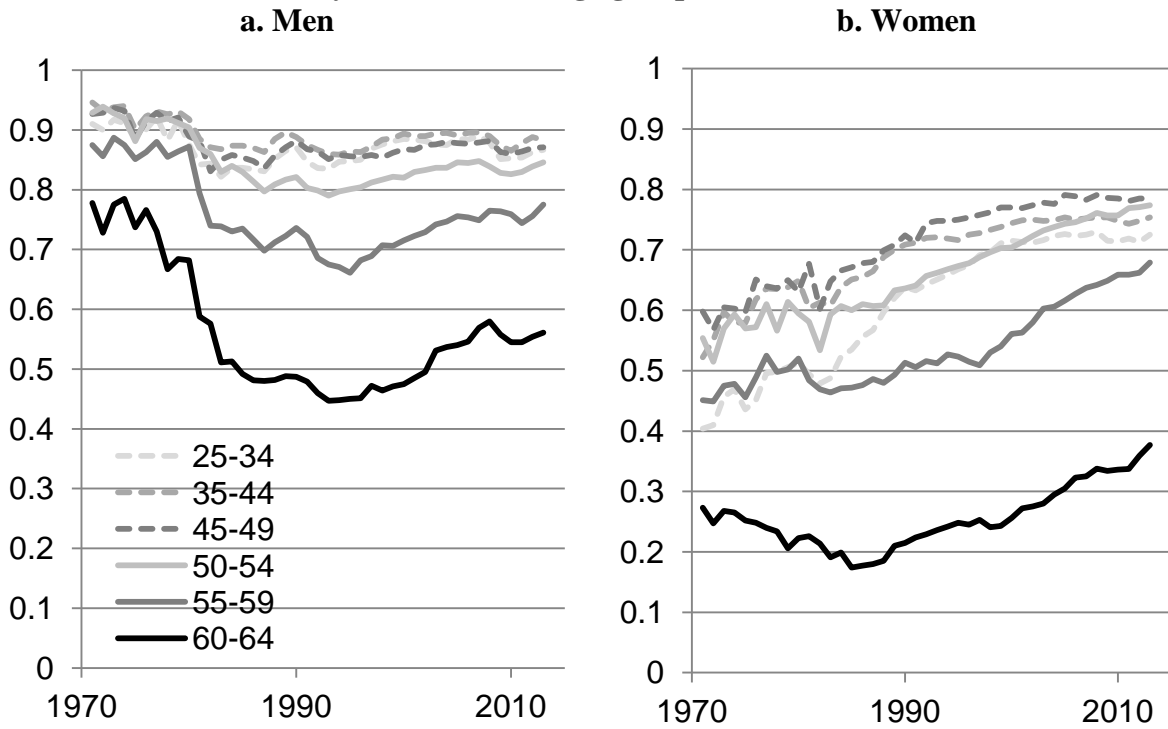
Sources: Authors' calculations using data from the Labour Force Survey.

Figure 5: Composition of disability benefit recipients by sex and disability index, individuals aged 50 to State Pension Age, 2002 to 2012



Source: Authors' calculations from waves 1 and 6 of the English Longitudinal Study of Ageing.

**Figure 6: Proportion aged 25 to 64 in paid work
by sex and broad age group, 1971 to 2013**



Source: Authors' calculations from pooled Family Expenditure Survey (1968-2012, N=390,477) and Labour Force Survey (1975, 1977, 1979, 1983-2013, N=6,997,526) microdata. Estimates for years with only FES data are adjusted based on age-sex specific relationship between FES and LFS rates in the years up to and including 1983 when both surveys were in place.

Notes: Definition of work includes all those working in the reference week (LFS) or month (FES) either as full or part-time employees or self-employed. Excludes babysitting coded as self-employment in FES pre-1982.

Table 1: Disability benefit receipt rates, by age, sex and disability level

Year	All aged 50-SPA	Male, Low Ed	Male, High Ed	Female Low Ed	Female, High Educ
2002					
None (0-1)	2.9	5.5	2.7	1.7	1.4
Mild (2,3)	15.0	25.7	13.9	11.1	9.8
Moderate (4,5)	34.4	50.9	33.3	29.8	16.2
Severe (6+)	55.3	72.2	54.3	37.9	45.2
2012					
None (0-1)	0.9	3.0	0.9	0.6	0.1
Mild (2,3)	6.8	11.2	7.0	5.7	4.4
Moderate (4,5)	15.5	21.1	18.6	8.2	14.7
Severe (6+)	37.2	51.8	34.2	31.1	31.7

Note: Authors' calculations from waves 1 and 6 of the English Longitudinal Study of Ageing. 2002 numbers are receipt of Invalidity Benefit, 2012 numbers are receipt of either Invalidity Benefit or Employment and Support Allowance.

Table 2: Changes in Benefit receipt and employment, by health level, 2008-2012

Disability level	Percentage point difference (2008-2012) in:			N 2008	N 2012
	Disability Benefit receipt	Employment	Job Support Allowance		
Mild (2,3)	-3.11 (-1.91)	-0.71 (-0.26)	1.04 (1.23)	683	559
Moderate (4,5)	-17.83 (-4.64)	3.23 (0.74)	1.62 (1.30)	234	245
Severe (6+)	-20.62 (-4.49)	-0.98 (-0.31)	-0.20 (0.14)	237	215

Note: Authors' calculations from waves 4 and 6 of the English Longitudinal Study of Ageing. Table presents difference in cell means between 2008 and 2012, with all variables adjusted for the sex, education specific trends in the group with 0-1 health and disability problems. Numbers in parentheses are t-ratios