

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

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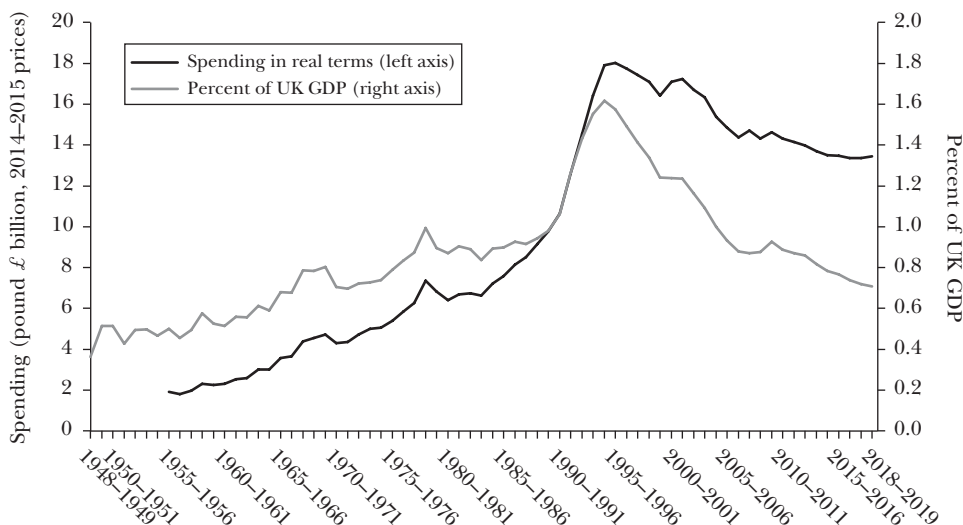
In the United Kingdom, public spending on total disability benefits rose steadily from about 0.4 percent of national income in 1950 to about 0.9 percent of national income in the 1980s. This was a period without significant reforms in the program other than a reform of the benefit rate structure in 1971. After this period, as shown in Figure 1, total spending on disability benefits increased sharply over the first half of the 1990s, reaching 1.6 percent of national income in 1995–1996. Concern with this spending 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 2018–2019 project them to be at their 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 remain 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, the total

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[†]To access the Data Appendix, visit
<http://dx.doi.org/10.1257/jep.29.2.173>

Figure 1

Total Spending on Disability Benefits in Great Britain, 1948–49 to 2018–19

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>).

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.

was 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.¹ In particular, while the period since the mid 1990s has seen a decline in the number of men aged 50 to 64 receiving disability benefits (from 1.1 million in 1996 to 0.6 million in 2013), the number of women aged 16 to 59 receiving these benefits has grown (from 0.8 million to 1.0 million). These trends mean that the previous 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) will likely be missed by some considerable distance.

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.²

¹ Source: UK Department for Work and Pensions administrative data for data from February 2001 to November 2013 inclusive. Data from 1971 to 1998 are taken from Anyadike-Danes and McVicar (2008).

² One challenge for this analysis is 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 (that is, not including Northern Ireland), while the Labour Force Survey (LFS) data cover the whole of the United Kingdom. English Longitudinal Study of Ageing (ELSA) data, on the other hand, cover England, which has, on average, slightly lower rates of disability benefit receipt than the rest of the United Kingdom.

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 as 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 behavioral 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.

It seems clear that in the absence of the various reforms discussed here, the number receiving disability benefits in the United Kingdom—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 its name over time. In 1971, it was referred to as *Incapacity 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).³ 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

³ Other substantial reforms to disability benefits in the United Kingdom 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.

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 raised in line with prices; this led the value of these benefits to fall to around 15 percent of average earnings (Banks, Emmerson, and Tetlow 2014) as average earnings in the UK, at least until recently, have tended to rise in real terms over time. As a result, those with average or higher earnings in the United Kingdom receive little protection from publicly provided disability insurance because the amount of disability benefit they could 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 person to do any kind of paid work rather than the ability to do work that might be considered appropriate for that person’s skills and experience. In addition, the new medical screening was removed from the personal doctors of the workers and was administered instead by medical staff at the regional level commissioned by the scheme’s administration. Finally, whereas previously those reaching the State Pension age—until April 2010, this 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 onto their State Pension, in 1995 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 receiving disability benefits to fall 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 would be payable at a similar amount for many.⁴

While the 1995 reform had, for working-age claimants, been focused on reducing the flow onto the disability 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

⁴ 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 receipt 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 an 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).

with an additional (time-limited) financial incentive to move off disability benefits and into paid work. These pilot programs were aimed initially at those who had just moved onto the benefit. The evaluation evidence suggested that the reform was effective at moving individuals off these benefits and also effective at moving them back into paid work (Adam, Bozio, Emmerson, Greenberg, and Knight 2008). The reforms then were extended nationwide and also applied to existing claimants, although the evidence on the effectiveness of these extensions is more mixed (Bewley, Dorsett, and Ratto 2008; Bewley, Dorsett, and Sallis 2009).

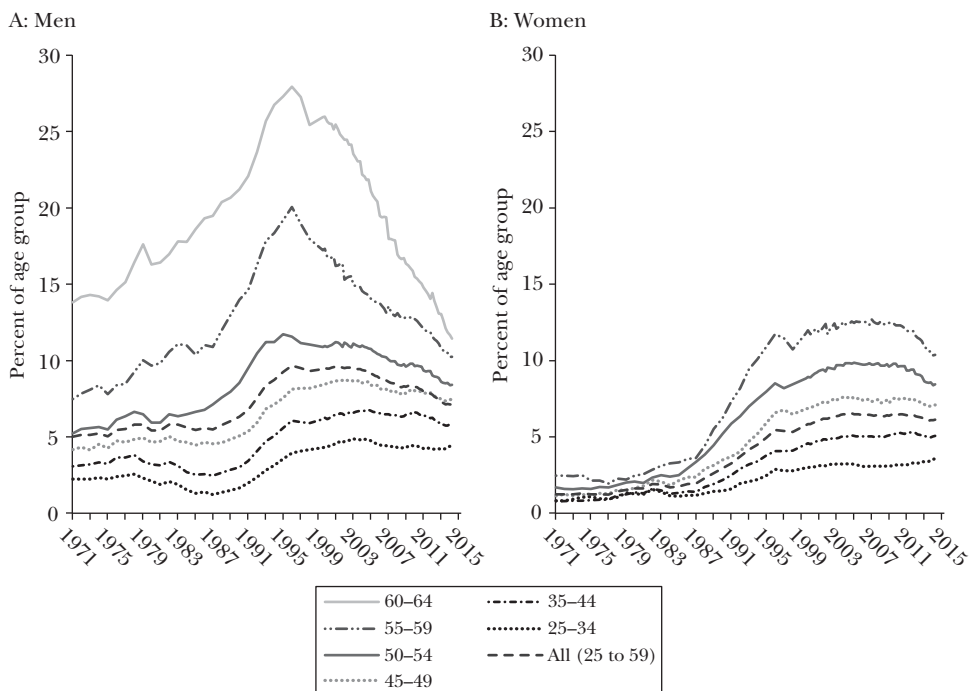
From October 2008, Incapacity Benefit for new claimants was replaced by the Employment and Support Allowance (ESA). The health test for Employment and Support Allowance is intended to be stricter than the health test for Incapacity Benefit: specifically, the new “Work Capability Assessment” (WCA) splits 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 program 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 (2011–2014), whereas prior to this, receipt among these groups had been either flat or rising over time. One might

Figure 2

Disability Benefit Claimant Rates of Men Aged 25 to 64 by Age Group, 1971 to 2014

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 November 14, 2014), for data from August 1999 to May 2014 (inclusive). Data from 1971 to 1998 are taken from Anyadike-Danes and McVicar (2008). Population estimates (to 2012) and projections (for 2013) by age are taken from the Office for National Statistics.

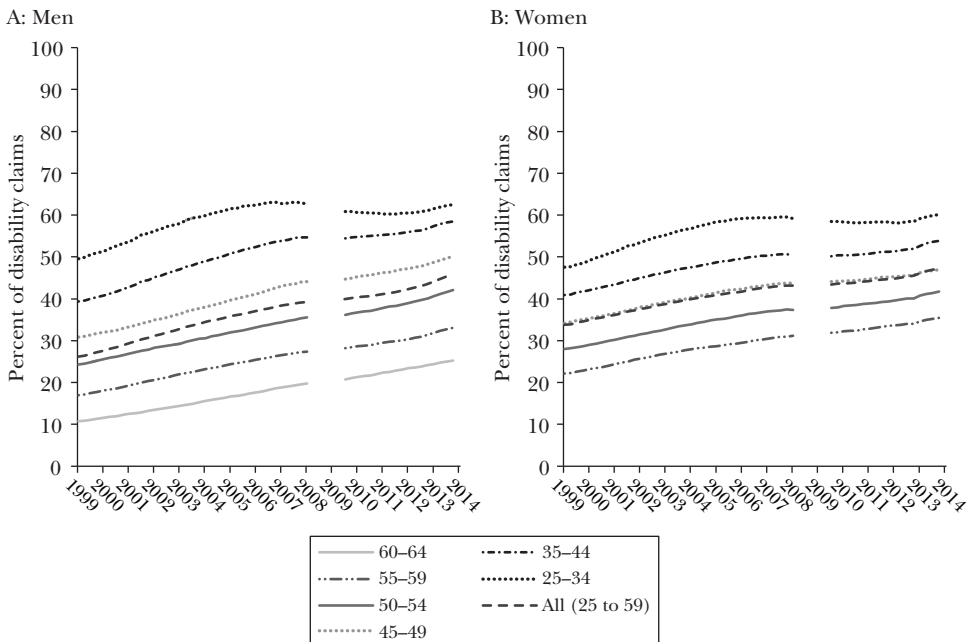
Notes: Claimants of Invalidity Benefit, Incapacity Benefit, and Employment and Support Allowance in Great Britain. No data are shown for women aged 60 to 64 since age 60 was the State Pension age for women for most of this period. For comparability the "All" category for both men and women is shown for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

have expected that these claim rates would increase during the recession, so the evidence 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 the rate of receipt of disability benefits has been declining sharply for older men since 1995 and older women since 2008, the rate of receipt among these groups still remains higher than among other groups. And when combined with the increasing size of this "baby boom" cohort over the last 20 years, this means that there have not been large declines in the absolute numbers receiving disability benefits. Administrative data show the number of disability 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 the number receiving disability benefits—and correspondingly the amount of public funding spent on

Figure 3

Percent of Disability Benefit Claims due to Mental and Behavioral Disorders, by Sex and Age Group, August 1999 to May 2014



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

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. The figure shows men aged 25 to 64 and women aged 25 to 59 as ages 65 and 60 were the State Pension ages for men and women respectively for most of this period.

them—would have ended up being substantially higher in the absence of the 1995 and (to a lesser extent) subsequent reforms.⁵

The administrative data also provide evidence on the principal health condition that has led to the disability benefit claim, with data available from August 1999 onwards. The share of disability benefit claims for reasons relating to mental or behavioral health problems, by age group and sex, are shown in Figure 3. Because 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 is the case among older men and women.

⁵ 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 number of 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.

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 proportion 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. Also, this trend may suggest consequences for which different employer or occupational health adaptations are required to facilitate these individuals returning to paid work.

Two other patterns in Figure 3 merit some comment. First, 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 behavioral reasons stopped increasing. While this coincided with the national rollout of the Employment and Support Allowance to the stock of previous Invalidity Benefit claimants with the shortest benefit durations, growth in the proportion of recipients in this age range claiming for mental and behavioral reasons subsequently returned in 2013. Second, the gradient across age has narrowed slightly over time for men, bringing it towards that observed for 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 percent of average earnings), earnings replacement rates are substantially lower for those with high education than for those with low education and low earnings capacity. Thus, 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.⁶

⁶ 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 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 labor market transitions of working-age individuals aged 50 and over.

The LFS covers the full UK household population and samples an average of around 250,000 individuals between ages 25–59 for women and ages 25–64 for men per year over the period 1998 to 2013. These data allow 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 nonnegligible 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: that is, 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.⁷ 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. These differences are immediately apparent in the LFS data: within all age and sex subgroups, the low educated are roughly four times more likely to be in receipt of disability benefits than their high-education counterparts.

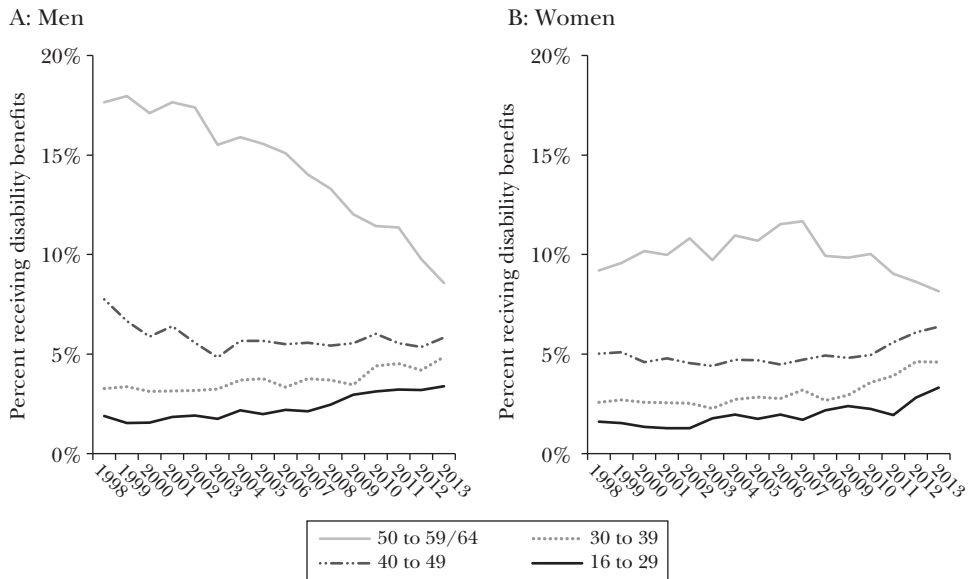
In addition, patterns over the last few years in particular need to be interpreted with caution because the recent recession is known to have affected education and sex subgroups differently. For example, the most recent recession involved a smaller fall in the proportion of paid work than in previous 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 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

⁷ 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.

Figure 4

Receipt of Disability Benefits among Those with a Low Level of Education, by Sex and Age Band, 1998 to 2013



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

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.

for more-educated older groups and either flat or rising for the more-educated younger groups. Figure 4 shows the stark differences in patterns for low-education older groups in comparison to their younger counterparts. Furthermore, while we do not present a figure on this, 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 the Employment and 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, mean 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.⁸ This

⁸ 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 as those with low levels of education aged 25 to 34 (odds ratio 0.49 with a 95 percent confidence interval of 0.41 to 0.59), whereas in 1998 they were twice as likely (odds ratio 2.15 with a 95 percent confidence interval of 1.81 to 2.56).

pattern may be related to the fact, noted earlier, that for those with low-earnings potential, the relative payoff 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).

Because 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 have 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 with an additional 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 (and, thus, to walking, standing, sitting, manual dexterity, and so on), 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 each individual in the ELSA sample is observed to have.⁹ 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), or severe (6 or more). Other than for reasons of sample size, our subsequent conclusions are not affected materially 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 covariation 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.

⁹ 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.

Table 1
Disability Benefit Receipt Rates, by Age, Sex, and Disability Level

| <i>Year</i> | <i>All aged 50–State Pension Age</i> | <i>Male, low education</i> | <i>Male, high education</i> | <i>Female low education</i> | <i>Female, high education</i> |
|-----------------|--|------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|
| 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 |

Notes: 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.

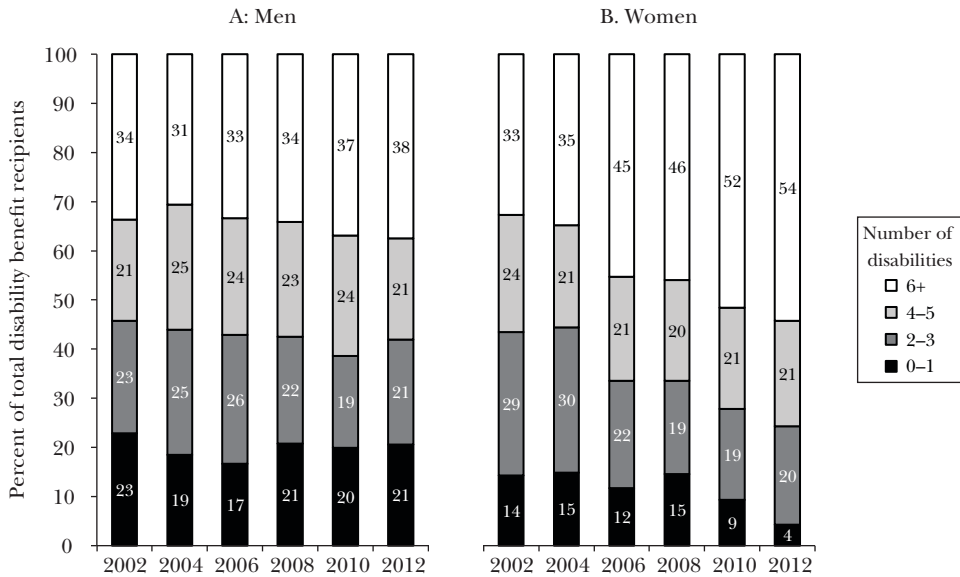
While this index is crude, it still correlates strongly with the receipt of disability benefits particularly for men: within the age group between 50 and the State Pension age, almost three-quarters of men with low education and severe disability (six or more conditions) in 2002 are observed to be receiving 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 lifetime labor 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, the probability 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 receipt are observed at all values of the index, with large absolute declines in receipt rates in the groups with the worst level of disability, and large proportionate declines in 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 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.

Figure 5

Composition of Disability Benefit Recipients by Sex and Disability Index, Individuals Aged 50 to State Pension Age, 2002 to 2012

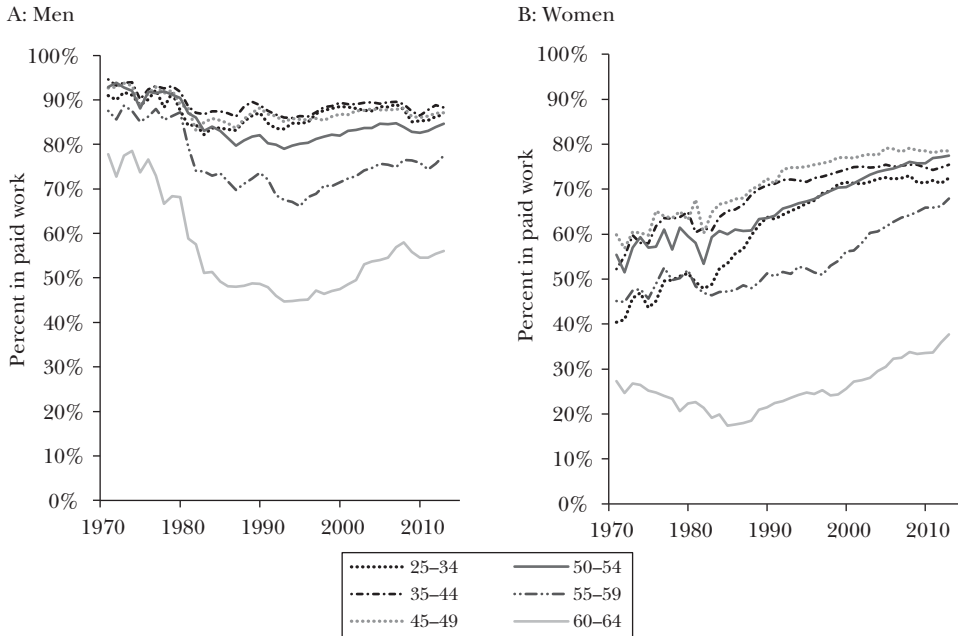


Source: Authors' calculations from waves 1 and 6 of the English Longitudinal Study of Ageing.
 Notes: An index of 0–1 means 0 to 1 disability conditions, 2–3 means 2 or 3 conditions, and so forth. See text for details.

Among women, the proportion of benefit recipients with six or more indicated disabilities increased over the whole period from one-third to over one-half of the total. In the most recent years, subsequent to the Employment and Support Allowance reform, there is striking reduction in the proportion of 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 percent 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.

Finally, we compare trends in employment with the disability trends both unconditionally and by education and health groups, to 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 for doing 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

Figure 6

Percent 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.

Jobcentre Plus adviser agrees).¹⁰ Thus, any trends toward lower claiming of disability benefits 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 (like family income or savings) until the individual reaches the State Pension age. This outcome 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

¹⁰ In the English Longitudinal Study of Ageing (ELSA) data, only a small fraction of those on benefits report 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.

Table 2
Changes in Benefit Receipt and Employment, by Health Level, 2008–2012

| <i>Disability level</i> | <i>Percentage point difference (2008–2012) in:</i> | | | <i>N</i> 2008 | <i>N</i> 2012 |
|-------------------------|--|-------------------|------------------------------|------------------|------------------|
| | <i>Disability Benefit receipt</i> | <i>Employment</i> | <i>Job Support Allowance</i> | | |
| 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 |

Notes: 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- and education-specific trends in the group with 0–1 health and disability problems. Numbers in parentheses are *t*-ratios

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, at least in the most recent years of data, and estimating a causal effect of benefit reform on employment rates is left for future work.

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 in 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 into 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 (that is, an unemployment benefit), with these differences being expressed relative to changes in the group with zero or one disability condition.¹¹ Thus, the group with a mild level of disability experienced, on average, a 3 percentage point relative decline in those receiving disability benefits.

¹¹ 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.

At the same time, there was a small (0.7 percentage point) but insignificant decline in employment and only a 1 percentage point rise in those receiving unemployment benefits (also statistically insignificant).

Taken together, the evidence in Table 2 does not provide strong evidence showing effects of the Employment and Support Allowance reform either on return to work or on movements onto unemployment benefits. 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 essentially no change in the numbers either employed or receiving unemployment benefits.

Summary and Conclusions

The United Kingdom has had a number of reforms to the rates and structure of disability benefits in recent decades 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 United Kingdom, most of the reduction in spending on disability benefits among those over the State Pension age that resulted from the 1995 reform, also resulted in higher State Pension spending. Similar interaction effects will be important when considering 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 of disability 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 as the highest-education 55–64 year-olds.

Fourth, as a greater share of women enter the labor force, a greater share are also 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 reforms that seek to expedite 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 labor 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 Employment and Support Allowance reform as it affects 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 is very limited, both in its scope and its statistical power, given how recently the reform occurred and the fact that we do not have much data in the post-reform period. Indeed, given the way the program has been rolled out, it is somewhat challenging to think of a more concrete evaluation of these potential substitution effects with the data available, at least 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 Employment and Support Allowance 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.

■ *Funding for this research comes from the Economic and Social Research Council through the Centre for Microeconomic Analysis of Public Policy at IFS (RES-544-28-5001). Data from the Labour Force Survey (LFS) and the English Longitudinal Study of Ageing (ELSA) were made available by the UK Data Archive. ELSA was developed by a team of researchers based at the National Centre for Social Research, University College London, and the Institute for Fiscal Studies. The data were collected by the National Centre for Social Research. ELSA is funded by the National Institute of Aging in the United States and a consortium of UK government departments coordinated by the ESRC. The authors are thankful to James Browne, Antoine Bozio, and Gemma Tetlow for useful discussions in previous projects that have informed much of the analysis here and to David Autor, Chang-Tai Hsieh, and Timothy Taylor for useful comments on an earlier draft. Responsibility for interpretation of the data, as well as for any errors, is the authors' alone.*

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