Reforming the Disabled State: A Comparative Policy Analysis

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Abstract

The traditional model for determining eligibility for disability benefits is based on the premises that an individual must be unable to work and that the disability can be medically determined. With a focus on US disability policy, this paper examines an alternative model that has been described as the work-capacity approach. This approach departs from the traditional binary/medical model of disability determination by seeking to identify a person’s remaining work-abilities, as opposed to an individual’s inability to work. This paper appraises whether work-capacity reforms in three countries – Denmark, Great Britain, and the Netherlands – have resulted in improvements in the accuracy of the disability determination process and in the employment of people with disabilities. The analysis draws on an examination of a harmonized cross-national panel data set that provides a nationally representative sample of older adults in each country before and after the respective reforms. The pre-post reform analysis suggests that the reforms improved the targeting of benefits towards those with more severe health conditions but the analysis provides no indication of improvements in employment. There is evidence, however, of the replacing of disability benefits with unemployment benefits.
I. Background

Of the many and varied social welfare programs run by governments, a disability benefit program may be the most challenging to design and administer. Unlike old age pension or low-income- assistance programs, eligibility for disability benefits cannot be determined simply based upon reaching a certain age or by attaining a measure of income or assets. Rather, governments must politically construct a definition of what constitutes a “disability” and design a disability determination process that optimally avoids both Type I (false positive) and Type II (false negative) errors. On the one hand, the public has little tolerance for fraudulent claims, and screening out applicants that are not truly disabled can be viewed as a policy priority (Berkowitz, 1987). On the other hand, people with disabilities are generally considered to be a highly deserving population and policy makers also have the objective to ensure that vulnerable people are not denied needed benefits (Stone, 1984).

Though disability, as a political construct, may not be objectively determinable, governments must nevertheless strive to develop coherent and fair disability determination processes. And in this effort, governments have traditionally relied on two major assumptions: that modern medical techniques can determine a person’s disability and that a medically determined disability can indicate a person’s inability to work. Building from these assumptions, a disability determination model is typically adopted that draws a clear distinction between those who are considered medically disabled and those who are not, and equates the disabled with those who are unable to work and the non-disabled with those who have work abilities. The disability benefit system in the United States (US) provides a clear example of this binary/medical model. To receive Social Security Disability (SSD) benefits, “the person must not be able to engage in any substantial gainful activity because of a medically determinable physical or mental impairment(s) expected to last a year or longer or to result in death” (Social Security Administration (SSA), 2015). A disability is thus assumed to be an all or nothing condition (“not be able to engage in any substantial gainful activity”) that has been verified by a medical diagnosis.¹

With a focus on US disability policy, this paper examines an alternative model for determining eligibility for disability benefits that has been described as the work-capacity approach (see, OECD, 2010). This approach departs from the assumptions of the traditional binary/medical model by seeking to identify a person’s remaining work-abilities, as opposed to an individual’s inability to work based upon a medical diagnosis. In theory, the work-capacity approach is consistent with the strengths-based approach in social work, as it concentrates on identifying what claimants can do rather than on the limitations that arise due to their impairment (Saleebey, 1992). It is also in accord with the ideas of social inclusion and empowerment envisioned by the Americans with Disabilities Act (Bagenstos, 2002; Brandt et al., 2011). Disability rights advocates have, for example, long argued that the idea of people with disabilities as unable to work is flawed and have instead promoted a social model of disability

¹ SSD benefits includes both the contribution based Disability Insurance program and the means-tested Supplemental Security Income program. Both programs rely on the same definition of disability to determine eligibility.
which views societal barriers to employment as the cause of their inability to work and not their medical condition (Barnes and Burke, 2014; Dorfman, 2016; see also, WHO, 2001).

It has been further argued that the work-capacity approach can improve the labor market participation of people with disabilities and reduce the growing fiscal burden of disability benefit programs on governments (OECD, 2003; 2011). In their report, Fiscal Austerity and the Transition to Twenty First-Century Disability Policy: A Road Map, researchers David Mann and David Stapleton (2011) propose a work-capacity reform in the US that entails adopting a new eligibility criteria for Social Security Disability Insurance (DI) benefits that focuses on the claimant’s “potential work capacity rather than on the chronic inability to work.” This new criteria would identify three categories of beneficiaries: retirees with impairments, people with low work-capacity, and workers with disabilities. Beneficiaries in the first two categories would receive benefits similar to those available under the current DI program, while workers with disabilities would receive a capacity rating reflecting the number of hours that he or she would be expected to work and a package of individually tailored services to assist them in returning to or staying in employment. Basing their estimates on evidence of the employment potential of beneficiaries, Mann and Stapleton estimate that at least 20% of those who would receive DI under current law would be considered workers with disabilities and thus could be diverted from disability benefits, thereby combining government savings with improvements in employment.

And there is no doubt that the employment rate for people with disabilities needs improvement. From 1989 to 2000, for example, the employment rate for men aged 18 to 64 with disabilities fell by 22 percent while that of men without disabilities dropped by 1 percent (Stapleton, Burkhauser, and Houtenville, 2004). The growing utilization of disability benefit programs is likely a major reason behind this decline. The proportion of the working-age population receiving DI benefits has more than doubled over the past thirty years (Liebman, 2015). That growth stems from a combination of factors. As wages in the labor market for low-skilled workers have stagnated, the relative value and thus attractiveness of disability benefits has increased (Autor and Duggan, 2003). The aging of the baby-boomer population has also intensified the demand for disability benefits, as people become more likely to develop work-limiting disabilities in their older working years (Liebman, 2015). Furthermore, changes to the determination process in the 1980s made disability benefits more accessible to people with low-mortality impairments, such as mental health and musculoskeletal conditions (Autor and Duggan, 2003). And changes to the welfare system, specifically the welfare reform of 1996 that restricted access to welfare benefits, increased the demand for disability benefits, which now serve as an option of last resort for many low-income individuals (Wamhoff and Wiseman, 2005).

For the US, the work-capacity approach has two major possible selling points. First, it could improve the accuracy of the disability determination process. Instead of an examiner focusing on a binary decision of awarding benefits or none whatsoever, that examiner would have the additional option of finding that the claimant has serious impairments but also remaining work abilities. This flexibility to make a more precise decision would not only allow for a more accurate determination of those needing benefits and better targeting to those needing assistance, it would likely have the added benefit of reducing the number of eligibility decisions
that are overturned on appeal. This is a major issue in what is perhaps the most litigious disability
determination process in the world (Diller, 1996). Second, a work-capacity approach could
theoretically reduce the number of long-term disability benefit recipients by providing
employment and rehabilitation services to people with disabilities who would like to stay in and
return to work but who have so far found that to be a largely insurmountable goal. Though more
than forty percent of SSD beneficiaries express a desire or expectation of returning to work
(Livermore, 2009), only four percent have left benefits for work in a recently studied ten-year
period (Liu and Stapleton, 2010). This paper thus appraises whether these two selling points
(improvements in determination accuracy and employment) have merit by providing a
comparative policy analysis of reforms in three countries identified by the OECD (2010) as
having adopted a work-capacity approach — Denmark, Great Britain, and the Netherlands.

Description of work-capacity reforms in Denmark, Great Britain, and the Netherlands

The Disability Benefit Reform of 2003 in Denmark was perhaps the most ambitious
attempt at introducing a work-capacity determination model. That reform replaced the previous
partial disability benefit program and introduced a new assessment process that requires all
claimants to develop a “resource profile” that describes the claimant’s abilities. The profile is
conducted by a social worker in conjunction with the claimant and his or her physician. The
assessment measures the claimant’s resources using twelve components, with the health
condition of the claimant serving as just one of the considered factors (see Table 1). For those
Danes with reduced work-capacity but remaining work-abilities, a wage subsidy is provided in
the form of a flex-job (‘Fleksjob’). Eligibility for the permanent disability benefit program
(‘Førtidspension’) is determined by whether the individual can participate in a subsidized work
arrangement or flex-job. The subsidy allows the individual the ability to work the hours that he
or she can while receiving compensation for full time work. When there are not enough flex jobs
available in the economy, individuals are paid a waiting benefit that is equivalent to the
unemployment or sickness benefit (see, OECD, 2013; Gupta, Larsen, and Thomsen, 2015).

A comprehensive work-capacity reform of Great Britain’s disability determination
process occurred with the Welfare Reform Act of 2008. The reform in Britain incorporated a
new disability determination process – the Work Capability Assessment – that assesses eligibility
for the disability benefit program. The process in Britain consists of a face-to-face assessment
with a healthcare professional that assesses how the claimant’s physical or mental impairment
affects the ability to work. The physical and mental assessment examines, among other activities,
the ability to walk unaided, stand or sit, reach above one’s head, understand communication,
learn or initiate tasks, and cope with social engagement (DWP, 2014). Those who are found to
have no work limitations are deemed “fit-for-work” and referred to the unemployment benefit
program. Those found to have a limited capability for work and work related activity are placed
into a “support group” and are provided permanent disability benefits. Like those in Denmark
eligible for the flex-job program, the British assessment also identifies claimants with a
remaining work-capacity who are placed into a work-related activity group. These individuals
receive time-limited benefits that are conditional on their participation in a job program. The
rules require these beneficiaries to have mandatory work-focused interviews with personal
advisers and to carry out work-related activities deemed appropriate to their circumstances. The penalty for non-compliance is a benefit sanction (see, OECD, 2014a; Morris, 2015a).

Table 1. The “Resource Profile” for Determining Disability in Denmark

| 1. Education and skills |
| 2. Labor market experience |
| 3. Interests |
| 4. Social competence |
| 5. Re-adjustment ability |
| 6. Learning ability |
| 7. Job preferences |
| 8. Performance expectations |
| 9. Work identity |
| 10. Dwelling and finances |
| 11. Social network |
| 12. Health |

Source: OECD, 2013

A 2006 reform in the Netherlands likewise instituted a new assessment process for its disability benefit program (the ‘WIA scheme’), which “emphasizes the use of residual capacity instead of compensating incapacity,” (De Jong, 2012: 13). This reform follows a series of major disability benefit reforms in the Netherlands, which successfully reduced disability benefit rates by increasing the financial responsibilities of employers to provide accommodation and sickness benefits to their employees (van Sonsbeek and Gradus, 2011; De Jong, 2012; Burkhauser et al., 2014). Similar to the British approach, the new Dutch assessment model also relies upon a doctor’s inventory of the applicant’s functional capabilities. While in Britain the number and severity of the functional limitations are scored to determine eligibility, in the Netherlands the functional information is fed into an algorithm representing the Dutch labor market to determine the individual’s residual earnings capacity. This produces a list of jobs corresponding to the claimant’s abilities and wage rates (De Jong, 2012) and is thus similar to the Dictionary of Occupational Titles used in the US disability determination process.

Those found to have remaining work-capacity in the Netherlands (judged as between 35 percent and 80 percent remaining earnings capacity) receive a partial and temporary disability benefit (‘WGA’) that comes with frequent reassessments. The benefit has two chronological phases. In the first phase, beneficiaries receive a benefit equal in time and benefit amount to the unemployment benefit (the maximum duration was 3.5 years in 2011). If the individual is unable to return to work in the first phase, he or she can then become eligible for a wage subsidy that incentivizes beneficiaries to work to their maximum abilities, while providing a minimum benefit for those who do not work. The 2006 reform also increased the minimum grade of disability required to receive benefits from 15 percent to 35 percent and thus tightened the eligibility criteria (van Sonsbeek and Gradus, 2011).
To review, in all three countries a new disability determination process was introduced incorporating a work-capacity approach that shifts away from relying exclusively on medical information to determine eligibility, and which identifies a group of eligible beneficiaries with remaining work-capacity for return to work interventions. These reforms, however, differed in three major respects. First, work-capacity is measured differently. In Denmark and the Netherlands, an individual’s ability to work is assessed based upon both functional abilities and whether the individual can realistically find work given his or her skills and training. The British assessment does not consider the previous skills or training of the claimant. Secondly, these reforms differ concerning the return to work interventions they provide to the group of beneficiaries found to possess remaining abilities to work. In the Netherlands and Denmark, a wage subsidy is provided. In Britain, beneficiaries are required to participate in an employment program. And thirdly, the countries part ways on the issue of reassessments for previous beneficiaries. In Britain and the Netherlands, all previous beneficiaries were re-assessed with the new determination process, while in Denmark only incoming claimants participated in the new assessment processes and previous beneficiaries were made exempt from the new determination process.

II. Research design, data, and methods

In order to examine the effects of the respective reforms, and, specifically, their ability to improve determination accuracy and employment, a multi-method analysis is used that combines a review of previous policy research with an analysis of a cross-national panel data set that incorporates a nationally representative sample of older adults age 50 to state pension age in each country before and after the respective reforms. Specifically, the dataset includes micro data on the health and socioeconomic status of older adults in the Netherlands and Denmark from the Survey of Health Aging and Retirement in Europe (SHARE) that is merged with a representative sample of older adults (50+) in Great Britain from the English Longitudinal Study of Aging (ELSA). Using data on the official pension age in each country for men and women (OECD, 2011), I restrict the analysis to individuals that are between 50 years old and the official age of entitlement in their respective country at the time of the survey. This ensures that all individuals in the dataset are considered of “working-age” in his or her respective country.

As an analytic approach, I borrow from Banks, Blundell, and Emmerson (2015) the construction of a health index for all individuals in the dataset during the years 2004 and 2012. This allows for an examination of differences in the benefit participation and the employment patterns of older adults with health issues before and after the work-capacity reforms were adopted. The health index uses the same health related survey questions that are available in both SHARE and ELSA. It consists of nine physical and mental health related items, including self-reported health, a measure of depression, activities of daily living limitations, the ability to

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2 See, Baumberg, et al. (2015) for a critique of this aspect of the British approach.
3 The Danish reform of interest was adopted in 2003 but the earliest baseline data available for the country is for 2004. Because that reform was limited only to incoming claimants, it is unlikely to have had a population level effect on the benefit and employment participation of those in fair or poor health at that time. The Dutch reform occurred in 2006 and the British reform in 2008.
see or hear, pick up a coin, and mobilize unaided. Each individual in the survey is provided a value from 0 to 9, which counts the number of disabling conditions the individual reports. Upon observing the distribution of the health index data in each country, the data is grouped into three categories to simplify the subsequent analysis: those with 0 or 1 conditions (good health), 2 or 3 conditions (fair health), and 3 or more conditions (poor health). Sensitivity analyses were performed to ensure that this grouping does not affect the conclusions drawn in the analysis below.

The finalized dataset draws on two cross-sectional survey waves from the years 2004 and 2012. In total, the dataset contains observations for 14,705 individuals, of which 3,102 are from Denmark, 7,920 from Britain, and 3,683 from the Netherlands. The weighted majority of individuals during both time periods are classified in good health (70%), a minority are classified in fair health (21%) and a smaller minority in poor health (9%). There are notable cross-national differences in health. For example, the weighted mean health index score for Great Britain is 1.52, while in the Netherlands it is 1.27 and in Denmark it is 1.04. This conforms to research documenting cross-national variations in health. While a crude measure of health, the health index correlates with disability benefit receipt. For example, at the baseline year of 2004, 50% of those in poor health were observed to be receiving disability benefits compared to 29% for those in fair health, and just 7% of those in good health. The major limitation of this dataset is, of course, that it is restricted to older adults and does not include data for those under the age of 50. Nevertheless, understanding the effects of disability benefit reforms on the population of older adults is critical for policy makers as they represent the majority of claimants. In the US, for example, 63 percent of all DI beneficiaries were between the ages of 50 and 64 years old in 2012 (SSA, 2012).

III. Results

Have the work-capacity reforms improved the accuracy of the disability determination process?

One way to examine improvements in the accuracy of the determination process is to examine the health characteristics of those on the disability rolls before and after the work-capacity reforms (see, Banks et al., 2015). For instance, an increase in the share of benefits recipients in poor health, or a reduction in the share of benefit recipients in good health, may indicate the improved targeting of benefits to those with more severe conditions. Figure 1 below

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4 The specific health measures included in the health index include: self-perceived health as fair or poor; the EuroD depression scale (with four or higher-labeled as depressed); the report of fair or poor eyesight for reading; fair or poor eyesight for seeing across distances; fair or poor ability to hear; the report of one or more ADLAs; one or more mobility issues; one or more large muscle issues; and the inability to pick up a small coin (fine motor). All survey questions match between SHARE and ELSA except the depression score. ELSA uses the eight question CES-D score for depression (a score of four or higher is labeled as depressed.)

5 This consists of waves 1 and 5 for SHARE and waves 2 and 6 for ELSA.

6 Explaining these differences, while a fascinating area of study, is outside the scope of this research project. For this research see Bambra and Beckfield (2012; Banks, Kumari, Smith, and Zaninoot (2012).
provides the health characteristics of those on the disability rolls before and after the work-capacity reforms.

As seen on that figure, the proportion of disability benefit recipients in poor health increased in Britain (+23 percent) and in the Netherlands (+18 percent) from 2004 to 2012. At the same time, the share of those in good and fair health decreased in both countries. This suggests the improved targeting of disability benefits to those in poor health. It may also indicate the effects of the reassessments and the adoption of a more stringent disability determination process, particularly in Great Britain. The considerable decline in the share of benefit recipients in Britain that were in both fair health (-36 percent) and good health (-22 percent) supports the notion that the new determination process effectuated a broad benefit retrenchment, in which some deserving individuals likely lost benefits (Morris, 2015b). Indeed, the Work Capability Assessment in Britain has encountered widespread criticism that claimants were improperly found fit-for-work (Morse, 2014).

In the Netherlands, on the other hand, changes in the composition of disability benefit recipients, particularly to those in fair health (-11 percent), appear more modest than in Britain. Implementation of the new assessment process in 2006 seems to have gone smoothly (OECD, 2014b). Prior to the work-capacity reform, it had a partial disability system in place and so it had administrative experience at measuring residual capacity. This prior experience likely made the new assessment process easier to implement than in Britain, which did not previously have a partial benefit program, and in Denmark, which adopted a fundamentally different kind of assessment process in 2003. Also, because disability policy in the Netherlands is targeted at
preventing applications for long-term disability benefits, few applicants for disability benefits are not severely impaired (de Jong, 2012).

In Denmark, the implementation of the work-capacity approach encountered substantial problems. Indeed, while the assessment process in Britain may have erred on the side of false negatives (denying benefits to deserving individuals), in Denmark the error seems to be in the direction of false positives. As Figure 1 indicates, the portion of disability beneficiaries in good health increased by 28 percent in Denmark. This may be reflective of the difficulties encountered with the ambitious attempt to comprehensively assess claimant abilities. The resource profiles proved complicated to implement and social workers were poorly trained at administering the assessment (OECD, 2013). Thus the OECD (2013), which had heralded the reform as an international best practice in 2003 (OECD, 2003), concluded that the resource profile was a “failure” in 2013.

In response to these problems, Denmark funded a large-scale demonstration project in 2010, which incorporated a new disability determination process that included the establishment of highly trained multidisciplinary return to work teams. These teams included trained psychologists and a new standardized workability assessment (Aust et al., 2012). The results of that demonstration project, which included a large scale randomized control trial, were inconclusive and varied across the municipalities that participated in the study (Nielsen et al., 2014; Poulsen et al., 2014). In 2012, Denmark, nevertheless, adopted a new assessment process nationwide that uses multi-disciplinary rehabilitation instead of a single caseworker to complete the resource profile, which is still used as the primary assessment tool (OECD, 2014).

**Have the work-capacity reforms improved the employment rates of people with disabilities?**

A major goal of the work-capacity approach is to improve employment outcomes for people with disabilities by providing temporary disability benefits and targeted return to work interventions to those with work limitations but also with remaining abilities. If these reforms were successful at improving employment, it would be expected that individuals in fair and, to a lesser extent, poor health would, on average, have a greater likelihood of being employed and a lesser chance of being on disability following the reforms.7

In Table 2 below, the population level trends in disability benefit participation, employment, unemployment benefit participation, and material hardship are provided for both before (2004) and after (2012) the work-capacity reforms were instituted in each country. The percentages represent the coefficients from a linear probability model, which applies an ordinary least squares regression to a binary outcome variable. The regressions were run separately for each country using the different dependent variables and health categories. The coefficients are expressed as relative to changes in the group with zero or no health conditions and are interpreted as the percent relative change for those in fair or poor health on the probability of

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7 Banks et al., (2015) analyze the disability benefit in Great Britain using a similar approach and the ELSA data from 2008 and 2012. The table presented here borrows from their analytical approach.
receiving disability benefits, being in work, receiving unemployment benefits, or experiencing material hardship from 2004 to 2012.⁸

A major finding from these regressions is the lack of a positive employment effect for those in fair or poor health in each country. In all the countries, the direction of the employment coefficient is negative. In Denmark, where the resource profile was beset with implementation issues, we observe no statistically significant relative changes in employment for those in fair or poor health. The Danish flex-jobs scheme has apparently not translated into employment results, a finding consistent with the OECD reporting in 2013 that few beneficiaries leave subsidized employment for permanent jobs. To address this issue, a comprehensive reform of the flex-job program is currently being proposed in Denmark that will time limit the wage subsidy to five years and introduce other changes to the subsidy amount intended to remove disincentives for participants to return to full employment (OECD, 2013). There was also no statistically significant positive employment effect in Britain, -2.3 percent relative change for those in fair health and -2.05 percent for those in poor health. This is not altogether surprising as Banks et al., (2015) also found no population level evidence of employment improvement for older adults in Britain following the reform. In the Netherlands, there was a significant decrease in the relative employment rate of those in poor health (-12.57 percent), as well as a statistically insignificant marginal decrease for those in fair health (-.25%). Thus, this analysis finds no signs of improvement in the relative employment rate of older adults in fair or poor health following the work-capacity reforms in Denmark, Great Britain, and the Netherlands.

The analysis does, however, find a striking inverse correspondence in two of the countries between the probability of receiving disability benefits and the probability of receiving unemployment benefits for people in fair health. In Denmark, the relative increase in unemployment benefits (5.9 percent and statistically significant) can perhaps account for the decrease in disability benefit receipt (-7.47 percent and not statistically significant) among those

⁸The linear probability model that is used in separate regressions for the four different outcome variables in each country is the following:

\[ Y_{it} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 \times X_2 + \epsilon_i \]

The dependent variable \( Y_{it} \) is an indicator variable that is equal to 1 if the individual is reported as on disability benefits, currently working, on unemployment benefits, or experiencing material hardship or 0 if not. The independent variable \( X_1 \) represents a binary indicator of the year the individual was interviewed (0 denotes 2004 and 1 denotes 2012). The independent variable \( X_2 \) is a binary variable that indicates the health status of the individual. Depending on the regression, this indicates whether the individual is in fair (0 or 1) or poor health (0 or 1). The interaction term \( X_1 \times X_2 \) indicates how the relationship between the dependent variables (i.e. work) and the health categorization (i.e. poor health) changed from 2004 to 2012. The regressions applied robust standard errors and individual level weights in order to extrapolate unbiased population level estimates. Each regression is performed on a restricted sample of the data so only those in poor and good health or fair and good health are compared. This allows us to infer the percent change for those in fair or poor health relative to those that occurred for those in good health.
in fair health. And in Britain, the statistically significant relative increase in unemployment benefits (2.68 percent) is inversely comparable to the relative decline in disability benefit receipt (-3.7 percent) for those in fair health. This may suggest that some people in fair health are replacing disability with unemployment benefits.

For individuals in fair health, receiving unemployment benefits instead of permanent disability benefits may more accurately reflect their economic circumstance. Research concerning the usage of disability programs as “hidden unemployment” schemes (Beatty and Fothergill, 2007) suggests that the reason many of these individuals are seeking benefits is an inability to find suitable employment and not the presence of a debilitating condition (Autor and Duggan, 2003). In this respect, the substitution onto unemployment benefits might be preferred as it can lead to more active labor market measures and an increased likelihood of return to work. Of concern, however, is that unemployment benefit programs provide less generous replacement rates than disability benefit programs, which may translate into increased material hardship for those in fair or poor health.

To explore this question, the relative change in the experience of material hardship was examined for those in fair or poor health in the three countries. This draws on self-reported survey questions on the difficulty of making ends meet in ELSA and SHARE. In Great Britain, we observe a statistically significant relative increase in the likelihood of experiencing challenges making ends meet for those in fair health (6.9 percent) and poor health (12.71 percent). The experience of material hardship also appears to have increased in the Netherlands for those in fair and poor health, 3.75 percent and 6.69 percent respectively, though the effect is not statistically significant. Interestingly, we observe an 11.29 percent relative decrease in the experience of material hardship for those in poor health in Denmark, though it is not statistically significant.

Table 2. Changes in Disability Benefit Receipt, Employment, Unemployment Benefit Receipt, and Material Hardship by Health Level, 2004 - 2012

<table>
<thead>
<tr>
<th></th>
<th>Disability Benefit</th>
<th>Employed</th>
<th>Unemployment Benefit</th>
<th>Material hardship</th>
<th>N</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2004</td>
<td>2012</td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair Health</td>
<td>-7.47%</td>
<td>-3.61%</td>
<td>5.9%</td>
<td>3.17%</td>
<td>886</td>
<td>2,003</td>
</tr>
<tr>
<td></td>
<td>(.044)</td>
<td>(.052)</td>
<td>(.027)*</td>
<td>(.041)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SHARE and ELSA apply different survey questions for determining material hardship. ELSA uses a deprivation index that counts whether respondents have, for example, too little money for doing things like paying for transport costs, buying your first choice of clothes, or buying presents for friends or families once (variable is “ndepriv”). Those reporting two or more deprivations (there are nine total) were labeled as experiencing material deprivation in Britain. The deprivation variable used in SHARE concerns responses to the survey question whether the individual resides in a household that is able to make ends meet (variable is “co007_”). Those who responded with some or great difficulties were labeled as materially deprived in the Netherlands and Denmark.
<table>
<thead>
<tr>
<th>Health Level</th>
<th>Great Britain 2004</th>
<th>Great Britain 2012</th>
<th>The Netherlands 2004</th>
<th>The Netherlands 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Health</td>
<td>3.18% (-.072)</td>
<td>-11.79% (.065)</td>
<td>0.8% (.046)</td>
<td>-11.29% (.07)</td>
</tr>
<tr>
<td></td>
<td>790</td>
<td>1,798</td>
<td>3,047</td>
<td>3,212</td>
</tr>
<tr>
<td>Fair Health</td>
<td>-3.7% (.016)*</td>
<td>-2.3% (.030)</td>
<td>2.68% (.012)*</td>
<td>6.9% (.031)*</td>
</tr>
<tr>
<td></td>
<td>3,304</td>
<td>3,429</td>
<td>1,515</td>
<td>1,807</td>
</tr>
<tr>
<td>Poor Health</td>
<td>-1.59% (.034)</td>
<td>-2.05% (.035)</td>
<td>2.67% (.012)*</td>
<td>12.71% (.037)**</td>
</tr>
<tr>
<td></td>
<td>3,047</td>
<td>3,212</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Author’s calculations from SHARE waves 1 and 5; ELSA waves 2 and 6.

**Note:** The percentage scores represent the coefficient on the interaction term from the linear probability model and are expressed as relative to the mean change of those with zero or no health conditions. Robust standard errors are provided in parentheses and statistical significance is indicated by ** p<0.01, * p<0.05

One possible explanation for the different changes in material hardship in the three countries following the work-capacity reforms is the reassessment process. All disability benefit recipients in the Netherlands and Britain were re-assessed when the new work-capacity programs were introduced, a process which may have increased the occurrence of material hardship for those in fair or poor health in those countries. In Denmark, in contrast, beneficiaries were grandfathered into the new disability benefit program. The reassessment process was particularly severe in Britain where 30 percent of beneficiaries were removed from the disability benefit rolls compared to 20 percent in the Netherlands (DWP, 2014; Einerhand and Swart, 2010). Moreover, the Dutch government provided a temporary benefit of twelve months to those reassessed and found not entitled to unemployment benefits, while no such benefit was provided in Britain. In 2006, 65 percent of terminated beneficiaries in the Netherlands were found working 30 months after being reassessed (Einerhand and Swart, 2010). Another plausible explanation for changes in material hardship may be differences in the generosity of the welfare programs. For those in fair health in Denmark, a generous social democratic welfare state (Esping-Andersen, 1990), the movement onto unemployment benefits from disability benefits was unlikely to materially affect that person’s economic security. However, in Britain, where the welfare regime provides less generous benefits, the switch from disability to unemployment meant a substantial benefit reduction, which could
account for the sharp increase in the experience of material hardship for those in fair and poor health.\footnote{The Comparative Welfare State Entitlement Dataset provides an index concerning the generosity of unemployment benefits in different countries (see, http://cwed2.org/). Between 2004 and 2010 the average score on the unemployment benefit index was 8.65 in Britain, 10.3 in Denmark, and 11.86 in the Netherlands. Unfortunately, that dataset does not provide information on the generosity of disability benefits.}

**VI. Discussion/Implications**

This analysis of population level trends in benefit receipt, employment, and material hardship both before and after work-capacity reforms suggests that those reforms improved the targeting of disability benefits to those with more severe conditions in two of the three countries analyzed. However, the data provides no evidence that the work-capacity reforms yielded noticeable improvements in employment, but instead indicate the likely substitution of unemployment benefits for disability benefits. The comparative analysis is, nevertheless, limited in a number of respects. The analysis is restricted to older adults and cannot provide a causal estimate of the reforms in each country. It is possible that the reforms improved employment rates for those of younger ages in fair or poor health. Younger disability benefit recipients, while generally a small share of total beneficiaries, are likely to have greater latent work-capacity than older beneficiaries and the reforms may have had greater success with this population. It also remains a possibility that the reported changes to those in fair and poor health could have been caused by a confounding factor other than the work-capacity reforms, such as changes in the business cycle that may have disproportionately affected those in fair or poor health relative to those in good health or other policy reforms in the respective countries.

The lessons for the US based on this study suggest that elements of the work-capacity approach could improve the targeting of benefits. In the Netherlands and Britain, the share of beneficiaries in poor health increased while those in good health decreased following the reforms, thus indicating that the reforms may contribute to the likelihood of benefits reaching the intended population. The work-capacity approach thus plausibly improves the accuracy of the determination process by shifting away from a medical assessment and towards an assessment of a disability benefit claimant’s ability to function and complete work-related activities. Indeed, the Government Accountability Office recently recommended that the SSA “modernize” the determination process by increasing its consideration of an individual’s ability to function (GAO, 2012). However, efforts to improve the accuracy of the assessment by targeting disability benefits to those in poor health may also lead to an increase in Type II errors, where some deserving people with disabilities are denied disability benefits and are forced to rely on less generous unemployment benefits. The relative increase in the occurrence of material hardship for those in fair and poor health in Britain, where efforts to target benefits were greatest, should serve as a point of caution for any future work-capacity reforms in the US.
On the issue of employment, this study indicates that for individuals with disabilities over fifty years of age it is likely very difficult to improve their employment rates. Despite the ambitious efforts of the countries studied in this analysis, this study found no evidence that indicated a relative improvement in the employment rates for people in fair or poor health. It may be that forgoing disability benefits and returning to the vagaries of the labor market is too risky for many older adults who are, in any case, closely approaching the state entitlement age (Olney and Lyle, 2011). Efforts to improve labor force participation rates may ultimately require more radical changes like the removal of employment restrictions attached to the disability benefits of older adults, such as the substantial gainful activity threshold in the US. Lifting such restrictions would allow older beneficiaries the ability to work without fear of losing benefits. Additional studies are needed to understand the effectiveness of work-capacity reforms for individuals less than fifty years of age. Those studies could shed greater light onto whether a work-capacity reform, such as that proposed by Mann and Stapleton (2011), could improve the employment prospects and economic well-being of people with disabilities in the US.

Notes:

1. This paper uses data from the generated easySHARE data set (DOI: 10.6103/SHARE.easy.200), see Gruber et al. (2014) for methodological details. The easySHARE release 2.0.0 is based on SHARE Waves 1, 2, 3 (SHARELIFE), 4 and 5 (DOIs: 10.6103/SHARE.w1.260, 10.6103/SHARE.w2.260, 10.6103/SHARE.w3.100, 10.6103/SHARE.w4.111, 10.6103/SHARE.w5.100).”


