

# ESTIMATES OF THE POTENTIAL INSURANCE VALUE OF DISABILITY INSURANCE FOR INDIVIDUALS WITH MENTAL HEALTH IMPAIRMENTS

JOHN BOUND, KYLE J. CASWELL AND TIMOTHY WAIDMANN \*

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## I. Introduction

Since the mid-1980s there has been dramatic growth in the number and fraction of Social Security Disability Insurance (DI) and Supplemental Security Income (SSI) beneficiaries with mental illness (Stapleton et al., 1998). Both the rate of growth in DI and SSI rolls as well as the changing composition of beneficiaries has been a source of concern among some policy makers. Because of their younger age and better physical health, this new group of beneficiaries will collect benefits for a longer period of time than their predecessors in the program. While it is conceivable that scientific advances and expanded use of pharmacological treatments for mental illnesses might reduce their disabling effects, recent empirical analysis of the work-disincentive effects of DI has found relatively small work disincentive effects for this group. Using recent data on DI applicants, Maestas et al. (2010) estimated that among mental disability applicants, the effect of being awarded benefits for those at the margin of working at all during the year was just 21%. While not reported by type of condition, their estimates for all applicants suggest that a majority of those who would otherwise work would not earn enough to disqualify them from benefits. Indeed other researchers have found that earnings prospects for this population are not great. Using detailed data on mental health disorders the National Comorbidity Survey, Jayakody, Danziger & Kessler (1998) found that early onset of these disorders resulted in lower educational attainment, and reduced rates of marriage and employment for men. More recent work (Kessler et al 2008) has found substantial earnings loss for those with serious mental illness.

This paper examines data on persons with mental illness to estimate the insurance value of the DI program for this population. That is, in the absence of disability benefits, what are the likely economic conditions facing those with severe mental illness? Using survey data from the Health and Retirement Study and Social Security Administration data linked to respondents, we examine the economic wellbeing of DI/SSI beneficiaries with mental illness compared to those with similar mental illness profiles not receiving benefits. Two sets of non-beneficiaries with mental illness are used for comparison -- those who had applied for benefits but were rejected, and those who for whatever reason chose not to apply, but were observationally equivalent to those who were awarded benefits.

## II. Data

The study uses data from the Health & Retirement Study (HRS) and administrative data from the Social Security

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*\*John Bound holds an appointment in the Department of Economics at the University of Michigan and is a faculty associate at the National Bureau of Economic Research. Kyle J. Caswell is an economist and research associate at The Urban Institute's Health Policy Center. Timothy A. Waidmann is currently a Senior Fellow in the Health Policy Center at the Urban Institute. This This Research Brief is based on MRRC Working Paper 2013-283.-*

Administration. The HRS is a longitudinal survey of a nationally representative sample of people over age 50 in the United States, which has been conducted since 1992. Several sources of administrative data from the Social Security Administration (SSA) were linked with the HRS for this work: the Master Beneficiary Record (MBR), the Supplemental Security Record (SSR) file, and the Master Earnings File (MEF). Administrative data supplement the HRS by identifying whether respondents received DI or SSI benefits at the time of interview, and among beneficiaries, whether the basis of eligibility was a mental illness diagnosis. The data are also used to identify whether respondents not receiving DI/SSI had ever applied for benefits and, if so, the status of the application(s) at the time of interview (i.e., rejected, pending). Using these data, we focus only on primary beneficiaries whose initial benefits were based on disabled worker status (e.g., excluding spouses and children of disabled workers).

### III. Methods

In the paper, we compare income, wealth, and health insurance status across DI/SSI beneficiaries and non-beneficiaries. For non-beneficiaries we report values before and after the propensity score weighting adjustment. Finally, for each income/wealth comparison we report averages across groups, as well as the probability that income/wealth is greater than zero. Propensity score reweighting methods are used to construct statistically similar comparison groups to study differences in economic outcomes between DI/SSI beneficiaries and non-beneficiaries (Barsky et al., 2002). We estimate latent models of DI/SSI eligibility to obtain propensity score estimates of DI/SSI eligibility. The dependent variable in the logit models identify DI/SSI enrollment using administrative data. Independent variables include mental health (CESD score, psychiatric problems), physical health (high blood pressure, diabetes, cancer, lung disease, heart attack/disease, stroke, arthritis, and obese), self-reported health status (“fair” or “poor”), and an indicator for whether the respondent has a health problem that limits their ability to work. Additional controls include age, sex, race/ethnicity, educational attainment, marital status, and spousal DI/SSI eligibility status. Four separate models are estimated for four different pairwise comparisons.

### IV. Discussion

Our analyses suggest that while federal and state Disability Insurance programs may not fully make up for income and wealth deficits experienced by persons with mental disabilities, they are an important source of support. This is clearest in rates of insurance coverage, where a DI or SSI award confers coverage by Medicare or Medicaid, respectively. Successful applicants have much higher rates of health insurance coverage than either non-applicants or rejected applicants. The same is true of persons with or without mental illness. In terms of total household income, we find that for those without any indication of mental illness, the DI and SSI programs increase per capita household income of successful applicants above that of rejected applicants, but the same is not true for those with mental illness.

Further, contrary to what is commonly thought, those who apply for DI benefits on the basis of mental illness do not appear to be more “marginal” applicants. In fact, persons with mental illness who have been denied DI and SSI benefits are worse off than those rejected applicants not reporting any mental illness on nearly every measure of well-being, and successful applicants with mental illness are worse off than successful applicants with only physical disabilities. Among those with mental illness, the fact that successful applicants appear worse off than observationally equivalent rejected applicants can be interpreted in several ways. One possibility is that the DI/SSI screening process is accurately discriminating between applicants on unobservable characteristics, selecting those with the most difficulty generating income.

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University of Michigan Retirement Research Center  
Institute for Social Research 426 Thompson Street Room 3026  
Ann Arbor, MI 48104-2321 Phone: (734) 615-0422 Fax: (734) 615-2180  
mrrcumich@umich.edu www.mrrc.isr.umich.edu

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