

WORKING PAPER

Executive Summary

NOVEMBER 2010, WP# 2010-19

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RETIREMENT
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at BOSTON COLLEGE

ACCOUNTING FOR DISABILITY INSURANCE IN THE DYNAMIC RELATIONSHIP BETWEEN DISABILITY ONSET AND EARNINGS

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The dynamic relationship between disability onset and earnings is well documented in the literature, but the mechanisms responsible for this relationship remain unknown. One possible mechanism, and the focus of this study, is the labor disincentives of disability insurance. The Social Security Administration (SSA) provides disability insurance through two programs: the Social Security Disability Insurance (SSDI) program and Supplemental Security Income (SSI). One criterion for benefit eligibility is the inability to engage in substantial, gainful activity, which, in 2010, is the capacity to earn more than \$1,000 per month. Because the criterion is defined by earnings, recently disabled individuals attempting to qualify for benefits may decrease earnings beyond the effect of the disability itself. A large body of literature measures the effect of disability insurance on labor supply more generally, but no study considers the extent to which insurance explains the dynamic relationship between health and earnings. This study aims to address this gap.

The data for the study come from a unique match of survey data to administrative data maintained by the SSA. The survey data come from several pooled panels of the Survey of Income and Program Participation (SIPP), which contain retrospective information on work-limiting disabilities. These data are matched to administrative data on longitudinal earnings, dates of disability application and receipt, and dates of death. The match data are unique, as no other data source contains information on disability onset, longitudinal earnings, and disability insurance behavior. Similar to previous studies, the analysis is limited to males.

Retrospective data on work-limiting disabilities, combined with data on longitudinal earnings, show that earnings decrease precipitously at the time of disability onset and that the decrease is greater among the more severely disabled. These patterns, consistent with those found in related literature, suggest a large, causal effect of health on earnings. Using data on disability insurance, disability onset also coincides with sharp increases in disability application and receipt. The largest increases occur among the totally disabled: from two years before to one year after disability onset, the percent applying for benefits increases from 1.9 to 26.8 percent, and the percent receiving benefits increases from 1.3 to 48.2 percent.

The simultaneous decline in earnings and increase in disability application and receipt suggest that disability insurance may play an important role in the dynamic relationship between disability onset and earnings. However, the analysis suggests that disability insurance accounts for little of the initial drop in

earnings at the time of disability onset, but its effect may be larger as time since disability onset elapses. These conclusions are derived from a fixed-effects model that bounds the effects as well as a matching model that estimates them directly. The results are largely attributable to the fact that individuals who report total disabilities exhibit declines in earnings regardless of whether they apply for benefits.

What do these findings imply for policy? An important policy question is whether SSDI or SSI beneficiaries could otherwise work. This study suggests that, had the accepted never applied, their capacity for work would be initially low, but may improve with time. Thus, to discourage SSDI and SSI applications and encourage long-run work, the initial drop in earnings could be insured with immediate, though temporary disability benefits. The SSDI program, in contrast, targets long-term disabilities with benefits available five months after onset. Because the counterfactual in this study is whereby the beneficiary never applies, the results do not imply that accepted applicants could otherwise work several years after receiving benefits. Thus, the results neither support nor disparage the use of continuing disability reviews, where the case of a disabled worker beneficiary is re-evaluated after years of benefit receipt.

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