RESEARCH Brief

RECONCILING FINDINGS ON THE Employment Effect of Disability Insurance

John Bound and Timothy A. Waidmann*

October 2010

Introduction

Over the last 25 years the Social Security Disability Insurance Program (DI) has grown dramatically. In 1985, 2.2 percent of individuals between the ages of 25 and 64 were receiving DI benefits. By 2008, this fraction had more than doubled to 4.6 percent. A significant share of this growth can be accounted for by the growing work force attachment of women. However, even among men, DI participation grew rapidly over the period, rising from 3.1 to 4.8 percent of 25-64 year old men. Congressional reforms that, importantly, made it substantially easier for those suffering from severe pain or depression to obtain benefits together with increases in the effective after tax replacement rate plausibly contributed significantly to both these increases and the downward shift in the age distribution of awards (Rupp & Stapleton, 1995; Autor & Duggan, 2006). With rapidly expanding rolls, together with the shift in the age distribution of awards, there has been a natural concern that many of those being awarded DI benefits may be quite capable of work. The fear was partially fueled by the fact that, during the 1990s and 2000s, while employment rates for working-aged men remained constant, the employment rates for women increased during the same time, employment rates for women with a work limitation remained constant.

Several recent influential studies using aggregate data have suggested that the recent growth in the DI program may account for much, if not all, of the employment decline of men with work limitations. We overcome limitations of previous studies by identifying an additional control population (non-applicants) through administrative records, and by assessing the expansion of the DI system jointly with employment rates for different application and age groups. Our results clarify that the employment decline during the early 1990s can only be explained by the concurrent DI expansion if the marginal beneficiaries would have worked at rates comparable to non-applicants, were they not receiving benefits. This seems doubtful. In addition, we extend the analysis past the period of rapid expansion of the DI program. Employment rates for men with work limitations continued to decline in the late 1990s and early 2000, despite a slowdown in the rate of growth of DI. This fact alone would seem to suggest other important factors at work.

Methodology, Data, and Sample Selection

We decompose the overall change in employment rates for those experiencing a work limitation into changes within and between application categories. Estimating the decompositions requires information about fractions of non-applicants, denied applicants, and beneficiaries, as well as their respective employment rates. We use the Survey of Income and Program Participation (SIPP), a nationally representative sample of individuals 15 years of age and older in the civilian non-institutionalized population. Respondents are interviewed once every four months for two to four years. When sampling a new SIPP panel, the Census Bureau randomly groups people into four rotation groups. Starting with the first rotation group, each subsequent rotation group is interviewed one month after the previous one. When interviewed, respondents are asked

* John Bound is the George E. Johnson Collegiate Professor of Economics at the University of Michigan, research professor in the Population Studies Center, and faculty associate in the Survey Research Center at the Institute for Social Research. Timothy A. Waidmann is a senior fellow at the Urban Institute's Health Policy Center. This Research Brief is based on MRRC Working Paper WP 2009-239. to provide information about the preceding four months, which are also called reference months.

While the SIPP asks respondents about their employment situation and work limitations, it does not contain information regarding applications and application outcomes for DI. Several administrative files were used in order to identify beneficiaries, denied applicants, and non-applicants. These files were matched to SIPP records using respondent's Social Security Number (SSN). Since people who disclose their SSN systematically differ from people who do not, we reweight the original population weights provided by Census (Raghunathan, 2004) before selecting those respondents who disclosed their SSN. The administrative records are not available for SIPP panels 1986 to 1989. Therefore, our analysis is restricted to the SIPP panel 1984 and SIPP panels 1990s and later.

We restricted our sample to men ages 25 and 61 who report a work limitation. We eliminate men younger than 25 because very few such individuals apply for DI and those older than 61 because they would be eligible for Social Security retirement benefits. We limit ourselves to men who identify themselves as suffering from some kind of work limitation because men who experience no such limitations are very unlikely to either apply for DI benefits or have them awarded.

Conclusion

This study attempts to reconcile divergent findings concerning the employment effect of the DI program. Using a decomposition strategy, we find that it is unlikely that the growth in the fraction of DI beneficiaries during the early 1990s can fully explain the employment decline. This result is substantiated by the steady employment decline during the mid-1990s to mid-2000s, with no corresponding strong increase in the fraction of beneficiaries. It therefore seems to be likely that factors other than the DI program have contributed to employment decline from 1990 to 2004. This is precisely the context in which the methods used by Bound and Waidmann (2002) and Autor and Duggan (2003) are likely to seriously exaggerate the causal role played by DI in explaining the decline in the employment of men with work limitations.

Since they were enacted, some analysts and policy makers have feared that the DI reforms of the mid and late 1980s allowed a large number of work-capable men onto the rolls, leading to the dramatic decline in labor force participation among men with health-related work limitations. However, our analysis suggests that other factors were behind that decline in participation, and that the growth in DI rolls experienced in the early 1990s was made up of men who would not have been working regardless of the DI expansion.

If the DI expansion does not explain the drop in employment among men with work limitations, we are still left with the question of what does explain that trend. While answering this question is beyond the scope of this paper, we can shed some light on directions for future research. For example, SIPP and CPS data can be used to examine sources of household income for men with work limitations who are neither working nor receiving disability benefits. For the families of these men, the earnings of other household members represents an important source of income, as do benefits from various social insurance programs such as veteran and workers' compensation benefits. There is no reason to suspect that such things as workers' compensation have become more available or more generous over the period in question, and, indeed, the SIPP and CPS data show, if anything, the reverse to be true. Beyond this, the fraction of men with limitations who are married with spouse present has fallen, making it harder for these men to rely on spousal earnings. All in all, we see no evidence that the move out of the workforce is due to any increase in the availability of alternative sources of income. At the same time, we find evidence that the earnings potential of this group has declined. With a substantial and growing fraction of these men out of work, estimating their earnings potential is problematic, but if we assume that those who are not working would have earned below median earnings had they worked, we can consistently calculate the 75th percentile of the potential hourly earnings distribution for these men. Under this assumption, we find that this dropped by roughly one-third between the early 1990s and late 2000s, suggesting that a shift in the demand for the labor of men in this population may be behind their employment decline.

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 mrrc@isr.umich.edu www.mrrc.isr.umich.edu

The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) through the Michigan Retirement Research Center (MRRC). The findings and conclusions expressed are solely those of the author(s) and do not represent the views of SSA, any agency of the federal government, or the MRRC.

Regents of the University of Michigan: Julia Donovan Darlow, Laurence B. Deitch, Denise Ilitch, Olivia P. Maynard, Andrea Fischer Newman, Andrew C. Richner, S. Martin Taylor, Katherine E. White, Mary Sue Coleman, Ex Officio