

# WORKING PAPER

## *Executive Summary*

NOVEMBER 2011, WP# 2011-23

CENTER *for*  
RETIREMENT  
RESEARCH  
*at* BOSTON COLLEGE

## WHAT EXPLAINS STATE VARIATION IN SSDI APPLICATION RATES?

BY NORMA B. COE, KELLY HAVERSTICK, ALICIA H. MUNNELL, ANTHONY WEBB

Social Security Disability Insurance (SSDI) applications and receipts vary greatly by state (McVicar 2006; Bound and Burkhauser 1999; Rupp and Stapleton 1998), which has led to concerns about potential inconsistencies in the application of disability standards. This possibility has prompted numerous Congressional hearings and reports, and led the Social Security Advisory Board (2001a; 2001b) to express concern about the Social Security Administration's (SSA) ability to disentangle the potential causes.

Much of the previous work focuses on the SSDI rolls, allowance rates or award rates; not as much attention has been paid to application rates (also referred to as filing rates) since Rupp and Stapleton (1998) summarized the known factors affecting caseloads.

Work by the SSA (1988) finds that economic and demographic differences are significant factors in explaining state SSDI application rates, but their sample lacks information about the underlying health of the population. Strand (2002) advances this work by adding some health and health insurance information but covers only a short time period (1997-1999). Duggan and Imberman (2009) explore the relationship between applications and the unemployment rate but do not control for other potentially confounding factors.<sup>1</sup>

While it is debated whether the overall growth in the SSDI rolls could be attributable to increased underlying disability,<sup>2</sup> clinical measures of health exhibit substantial state-level variation, and this variation could drive the differences in the growth of state-level applications. For example, age-adjusted mortality rates are 25 percent higher in Mississippi and 22 percent lower in Hawaii than the U.S. average (National Center for Health Statistics 2010). Self-reported disability varies even more, even after controlling for individual characteristics (Subramanian, Kawachi, and Kennedy 2001), although this variability may in part reflect labor market conditions (Parsons 1982; Haveman, de Jong, and Wolfe 1991; Gruber and Kubik 1997; Currie and Madrian 1999; Bound and Burkhauser 1999). Variations in poverty rates between states also may lead to differences in the incidence of mental and physical impairment (McCoy, Davis, and Hudson 1994).

In addition to investigating the extent to which this geographic variation in SSDI applications reflects differences in demographics, disability, and state economies, this paper also examines the correlation between state policies and application rates. States play a critical role in both the administration of the SSDI

<sup>1</sup> See Rupp and Stapleton (1995) for a survey of earlier studies estimating the effect of changes in the unemployment rate on the SSDI application rate.

<sup>2</sup> See Bound and Burkhauser (1999) and Autor and Duggan (2003).

program and, indirectly, in determining its attractiveness. State governors appoint the top state-level administrators of the program, which could directly affect program administration (Iyengar and Mastrobuoni 2008). If the program administration makes acceptance more likely, decreases wait-time, or in other ways streamlines the application process, then applications could increase. State policy indirectly affects the relative value of the Medicare component of receiving SSDI benefits by affecting the accessibility and affordability of other forms of health insurance through the regulation the private insurance market and the administration of the Medicaid program. States also determine the generosity and duration of unemployment insurance benefits, affecting the valuation of the financial benefit of SSDI.

This project uses state-level data from 1993-2009 from numerous data sources. We examine the total SSDI application rate as well as its two components: SSDI-only and SSDI-SSI concurrent applications, to see if two populations are responsive to different state characteristics or policies. We find, not surprisingly, that health, demographics, and employment are the major determinants of this state-variation. These simple covariates explain over 70 percent of the variation in total SSDI application rates. It is interesting to note the relationship between the macroeconomy and SSDI: our estimates suggest that the labor force participation is more important than the unemployment rate. Further, we find that SSDI-only applications are sensitive to unemployment insurance benefit duration, while SSDI-SSI concurrent applications appear to be independent of the unemployment rate as well as unemployment benefit parameters.

Two of the most interesting findings in this paper are the role of state-mandated disability insurance and strict health insurance market regulations. Mandated private temporary disability insurance (TDI) is negatively correlated with the overall SSDI application rate, driven by the applicants who also apply for SSI. Further, while it does not explain the between-state variation, we find that strict health insurance market regulation is correlated with lower SSDI applications within a state. This is the first evidence of which we are aware that health insurance regulation influences SSDI applications, and motivates further work.

---

© 2011, Norma B. Coe, Kelly Haverstick, Alicia H. Munnell, Anthony Webb. All rights reserved. The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) funded as part of the Retirement Research Consortium (RRC). The opinions and conclusions expressed are solely those of the authors and do not represent the views of SSA, any agency of the federal government, the RRC, Netspar, Duke University, the VA Administration, or Boston College.

## CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

Hovey House, 140 Commonwealth Avenue, Chestnut Hill, MA 02467-3808  
phone 617.552.1762 fax 617.552.0191 crr@bc.edu crr.bc.edu