

Understanding the Geographic Variation in Social Security Disability Insurance

PIERRE-CARL MICHAUD, TIMOTHY MOORE, DAVID WICZER

Key Findings and Policy Implications

This paper analyzes the geographic variation in Social Security Disability Insurance (SSDI) applications and allowances from 1996 to 2014; and identifies the community-specific factors that are associated with higher rates of SSDI participation. The period of study is interesting, because of the reversal in enrollment trends from a time of rapid enrollment growth to a time of steady decline. The analysis uses SSA administrative data for more than 3000 counties and county-equivalents (parishes, independent cities, boroughs). It finds that:

- There is substantial variation in SSDI participation across counties, and that variation is rising over time. The top 10% of counties in terms of SSDI allowance rates consistently accounted for approximately 25% of all national allowances, while the top 25% of counties accounted for 50% of the total.
- County allowance rates persist over time. The year-to-year rank correlation of allowances per 1,000 people is 96% both during the rise in enrollment from 1996 to 2010 and during the decline from 2010 to 2014. The county rank of applications per 1,000 are even more persistent: 97% in the rising period before 2010 and 98% in the decline since 2010.
- The factor with the strongest association with SSDI participation by county is health, as measured in the data by mortality rate. Rural counties generally have higher rates of both allowances and applications. Mortality and poverty rates are associated with both higher allowance rates and with the growth rate of allowances over time.
- SSDI application and enrollment trends differ by gender. For example, enrollment growth has been larger and more skewed across counties for women than for men. Also, male allowances and applications have relatively strong associations with economic factors, while female applications and allowances have relatively stronger associations with mortality rates.

Analyses of geographic variation are important for understanding both participation trends, and what causes them. It is helpful to know, for example, the extent to which geographic variations in SSDI participation are driven by health measures, such as mortality rate. The paper provided clear evidence that health matters a lot in explaining county variations in participation. But other factors also matter, such as population density, cost of living and poverty.

AMANDA MICHAUD is Assistant Professor of Economics at University of Western Ontario and an NBER Research Economist.

TIMOTHY MOORE is Associate Professor of Economics at Purdue University and an NBER Research Associate.

DAVID WICZER is Assistant Professor of Economics at Stony Brook University and a Research Economist at NBER.

Complete DRC Working Papers available on our website: <u>http://www.nber.org/aging/drc/papers/</u>

This research was supported by the U.S. Social Security Administration through grant #DRC12000002-06 to the National Bureau of Economic Research as part of the SSA Disability Research Consortium. 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 NBER.