
What Can We Learn from County-Level Variation in Child SSI Participation Rates?

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This issue brief summarizes our research findings on the factors related to geographic variation and the growth of the child Supplemental Security Income (SSI) program. Our analysis is the first to exploit county-level variation in caseloads over time for insights on the determinants of child SSI caseloads. We find health and economic variables explain a significant share of the variation in SSI receipt across counties. However, we also find that changes in these factors explain only a quarter of the growth in child SSI rates nationally from 2003 to 2011, and the influence of these health and economics factors varies substantially by state and region. This points to the need for state-specific studies to shed light on the different factors driving SSI growth across states.

Introduction

The child Supplemental Security Income (SSI) program has grown substantially in recent years, rising 55 percent from 2000 to 2012, though the factors influencing growth are not well understood. This growth is striking, in part because unlike changes in the prior decade, it occurred in the absence of any major policy changes liberalizing eligibility. Some have argued that SSI has become an alternate safety net after the 1996 welfare reform reduced the cash assistance available to low-income families with children (Berkowitz and DeWitt 2013; Schmidt 2013; Wittenburg et al. 2015).

To understand the causes of this growth, researchers have documented that both levels and growth rates of child SSI vary substantially across states. These differences across states are

particularly puzzling given that SSI is a federal program, with federal eligibility standards. When the program was enacted in the 1970s, the intent of policymakers was to create a federal program that would standardize support across states for low-income people with disabilities and older adults (Berkowitz and DeWitt 2013). Researchers have examined variation across states but have not yet been able to explain much of the differential program growth with these analyses. In their 2013 study, Aizer et al. found that “no small set of factors can explain the differential growth across states” from 2002 to 2012.

The purpose of this DRC issue brief is to summarize our research findings on the factors related to geographic variation and the growth of the program. Our analysis, which is described fully in Schmidt and Sevak (2016), is the first to exploit county-level variation in caseloads over time for insights on the determinants of child SSI caseloads. We find several health and economic variables, such as poverty status, are positively correlated with SSI receipt. However, we also find that changes in these factors explain only a fraction of the growth in child SSI rates, and the influence of these health and economics factors varies substantially by state and region. This latter finding is important because it further indicates that the factors driving SSI growth differ substantially by state, which illustrates why it is difficult to characterize SSI growth using a few limited factors, such as changes in overall poverty status or disability incidence.

Overview of the child SSI program

The SSI program provides income support to low-income children and adults with disabilities (as well as older adults) in the United States. The program was enacted in 1972 and began providing benefits in 1974. The program is fully federally funded, and benefits are set at the federal level, although 32 states provide additional supplemental benefits to child recipients (Social Security Administration [SSA] 2015). Eligibility is based on income and assets as well as medical criteria, and award of benefits often follows a lengthy disability determination process (see Duggan et al. [2015] for a detailed description of the disability determination process for children).

Before 1990, the child SSI program was small, serving only about 255,000 children in 1988. Since then, the program has evolved into an important part of the safety net. Rapid growth in the program began in the early 1990s, when the Supreme Court decision *Sullivan v. Zebley* rejected what were in essence more restrictive SSI eligibility criteria for children relative to adults and added a number of mental conditions, such as severe attention-deficit/hyperactivity disorder (ADHD), to the list of qualifying conditions for children (Berkowitz and DeWitt 2013). Child SSI participation tripled from 1991 to 1996, rising from 300,000 to 900,000 cases in this five-year span. In response, the Personal Responsibility and Work Opportunity Reconciliation bill of 1996 that enacted major welfare reform also included a number of provisions aimed at stemming the growth in the child SSI caseload (Schmidt 2004).

However, child SSI participation began to rise again in 2000, and the increase has continued nonstop despite the absence of major policy changes that would lead to this pattern. A Government Accountability Office report from 2012 considered a number of potential explanations. The first included increases in disability due to low birth weight or improved awareness and diagnosis of various mental conditions. The second included policy factors such as an increase in the share of children obtaining health insurance and therefore better access to physicians and diagnosis, increased identification of children with disabilities through public school special education services, and fewer child SSI exits due to lack of funding for continuing disability reviews. The third included economic factors such as increases in poverty. A recent Institute of Medicine study

commissioned by the SSA also noted the possible role of increases in child poverty, but it stressed the importance of differential state trends as well (National Academies 2015).

Wittenburg et al. (2015) documented that although some cross-state variation existed in child SSI participation in 1998, variability across states in child SSI population ratios had increased dramatically by 2013. In fact, as illustrated in Figure 1, there is substantial variation in child SSI participation rates across counties in any given state. Given the substantial within-state, cross-county variation in SSI receipt, it is likely that local conditions are driving receipt and that state-level aggregates may mask these relationships.

Overview of methodology

Our research adds to the existing literature by analyzing county-level variation in child SSI participation over time in two ways. First, we extend previous state modeling efforts of SSI caseloads by including county-level data, which is an important addition, given the within-state variation in child SSI caseloads documented in Figure 1. Second, we estimate separate models by region and for individual states to show that the factors related to caseload growth differ widely across states.

To do so, we use a county-level panel of data from 2003 to 2011 on SSI receipt and the factors that could be related to receipt, assembled from a number of sources. These factors include ADHD diagnoses, low birth-weight babies, the percentage of students receiving special education services, the poverty and unemployment rates, and the share of jobs that are in manufacturing. We generate the child SSI participation rate from SSA administrative data on the number of child SSI recipients by county (numerator) and U.S. Census Bureau child population counts (denominator). Using these data, we estimate econometric models of SSI participation rates over time, nationally and separately by region and selected states, to identify factors associated with cross-county variation and within-county growth in SSI rates.

Factors associated with county-level child SSI participation rates

Local population and economic characteristics are related to county SSI rates

We find that differences in state- and county-level health variables that should be related to SSI eligibility can explain some but not all of the geographic variation seen in Figure 1. For example, counties with higher rates of low birth weight, ADHD diagnoses, students receiving special education services, and poverty have significantly higher rates of SSI receipt. We also find that county demographic characteristics are correlated with county SSI rates. Counties with a higher share of Hispanics have lower child SSI participation, consistent with previous findings showing that Hispanics are underrepresented in disability populations (Ben-Shalom and Stapleton 2014). Related, the percentage of English language learners at the school-district level is negatively and significantly associated with child SSI participation. Counties with a higher share of African Americans have higher rates of child SSI participation (Schmidt 2013). In some cases, the magnitude of these relationships is quite large.

Local population and economic differences explain less of the *growth* in child SSI rates over time

Although our county-level analysis documents strong relationships between county-level health, economic and demographic variables, and child SSI rates, we find that changes in these variables explain much less of the differential growth in child SSI rates over this period. This

contrast in findings suggests the presence of persistent geographical variation in these factors that is correlated with persistent geographical variation in child SSI participation.

To illustrate how much of the growth these variables explain, Figure 2 shows the growth in the child SSI participation rate in the United States as a whole and in selected states. It also illustrates the share of this growth that can be explained by changes in the same state and county characteristics. In the United States, where the percentage of children receiving SSI increased by 32 percent between 2003 and 2011 from 1.3 percent to 1.7 percent, changes in these variables explain just one-quarter of this growth. Another way of saying this is that changes in these variables alone would have led to an 8 percent increase in the rate.

The extent to which these variables explain growth differs substantially across regions and states

Given the variation in SSI rates illustrated in Figure 1 and differential growth rates across the states, it is not surprising that we find that the extent to which the model variables can explain growth rates varies substantially across states. In Figure 2, we see that in California and Ohio, states that had relatively low growth of about 25 percent in the child SSI rate, changes in county characteristics explain more than 60 percent of the growth in receipt. In contrast, in Pennsylvania, a state with high growth, changes in observable variables explain just over 5 percent of the growth in the SSI receipt rate. In Texas, changes in observable variables suggested that caseloads would have declined by 9 percent; however, the rate of receipt increased by 90 percent.

Results included in Schmidt and Sevak (2016) show that the estimated relationship between specific variables and SSI rates varies substantially across census regions and states. For example, although we observed a positive relationship between ADHD, low birth weight, and child SSI nationally, when we estimate separate models by region, we see this relationship is driven entirely by counties in the South. In the South, an increase in the percentage of students receiving special education services is associated with decreases in child SSI participation, whereas in the Northeast, both rates move in the same direction. Although the relationship between poverty rates and SSI rates is consistent across regions, unemployment is positively associated with caseloads in the Midwest but negatively associated with caseloads in the South. These findings suggest that studies that rely exclusively on national models of caseload growth would produce estimates that dampen the significance of factors that are important in some states but not in others.

Discussion

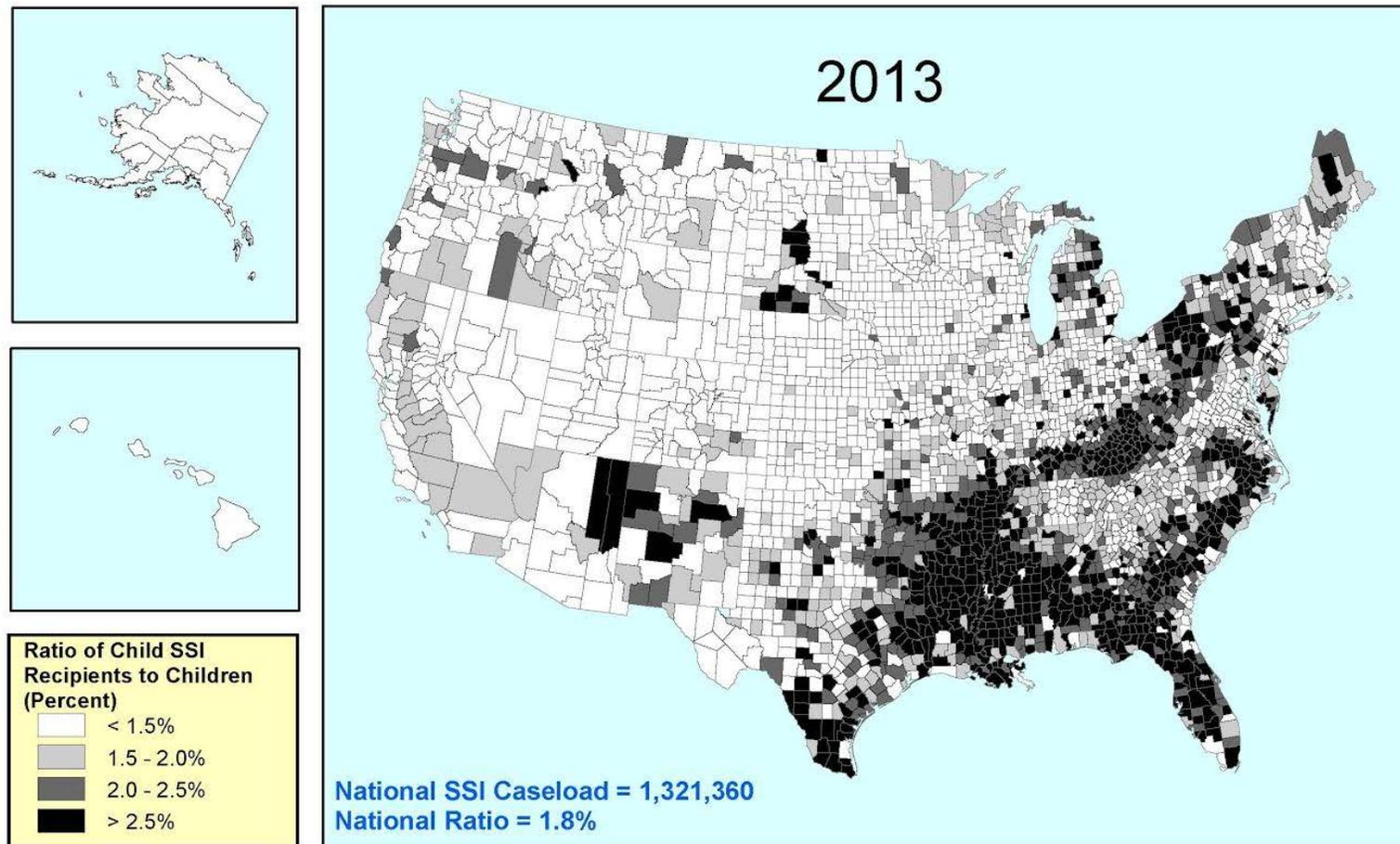
Previous research examining state-level determinants of child SSI caseloads found few statistically significant predictors. Our research finds a great deal of cross-state heterogeneity—both in child SSI participation and the factors that affect child SSI participation and growth. Poverty rates, health conditions, and special education services are important predictors of child SSI participation in some states, but not in others, explaining an average of 25 percent of the growth from 2003 to 2011 in the United States. These variables explain more of the growth in states that had relatively low caseload growth and less of the growth in states that had high caseload growth, including Texas. These state differences are particularly interesting, given that one of the goals of the SSI program from its inception in the 1970s was to standardize support across states for low-income individuals with disabilities. Understanding this heterogeneity has important implications for program costs and for equity.

Although our research provides new evidence on some of the factors associated with child SSI caseload growth, a great deal of the growth, especially in more recent years, remains unexplained, warranting additional research. Additional factors that affect eligibility, including child health conditions and local labor market conditions, may be contributing to differential growth over this period, but difficulty measuring these factors for all counties and years limits the ability to test this. Finally, the variation we find across states in the relationship between SSI participation and economic and health conditions suggests that state-specific case studies of caseload growth that pay careful attention to local factors may be fruitful in providing additional understanding of the child SSI caseload.

References

- Aizer, A., N. Gordon, and M. Kearney. "Exploring the Growth of the Child SSI Caseload in the Context of the Broader Policy and Demographic Landscape." NBER Disability Research Consortium Working Paper NB13-02. Cambridge, MA: National Bureau of Economic Research, 2013.
- Ben-Shalom, Y., and D. Stapleton. "National and State Program Participation Ratios for Working-Age People with Disabilities—Final Report." Princeton, NJ: Mathematica Policy Research, 2014.
- Berkowitz, E. D., and L. DeWitt. *The Other Welfare*. Ithaca, NY: Cornell University Press, 2013.
- Duggan, M., M. S. Kearney, and S. Rennane. "The Supplemental Security Income (SSI) Program." NBER Working Paper No. 21209. Cambridge, MA: National Bureau of Economic Research, 2015.
- Government Accountability Office. "Supplemental Security Income: Better Management Oversight Needed for Children's Benefits." GAO-14-497. Washington, DC: Government Accountability Office, 2012.
- National Academies of Sciences, Engineering, and Medicine. *Mental Disorders and Disabilities Among Low-Income Children*. Washington, DC: The National Academies Press, 2015.
- Schmidt, L. "Effects of Welfare Reform on the Supplemental Security Income (SSI) Program." National Poverty Center Policy Brief No. 4. Ann Arbor, MI: National Poverty Center, 2004.
- Schmidt, L. "The New Safety Net? Supplemental Security Income After Welfare Reform." Williams College Working Paper 2013-07. Williamstown, MA: Williams College, 2013.
- Schmidt, L., and P. Sevak. "Child Participation in Supplemental Security Income: Cross- and Within-State Determinants of Caseload Growth." Unpublished manuscript, 2016.
- Social Security Administration. "Understanding Supplemental Security Income SSI for Children—2015 Edition." 2015. Available at <https://www.socialsecurity.gov/ssi/text-child-ussi.htm>. Accessed 5/2/2016.
- Wittenburg, D., J. Tambornino, E. Brown, G. Rowe, M. DeCamillis, and G. Crouse. "The Changing Role of the Child SSI Program in the Safety Net." Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2015.

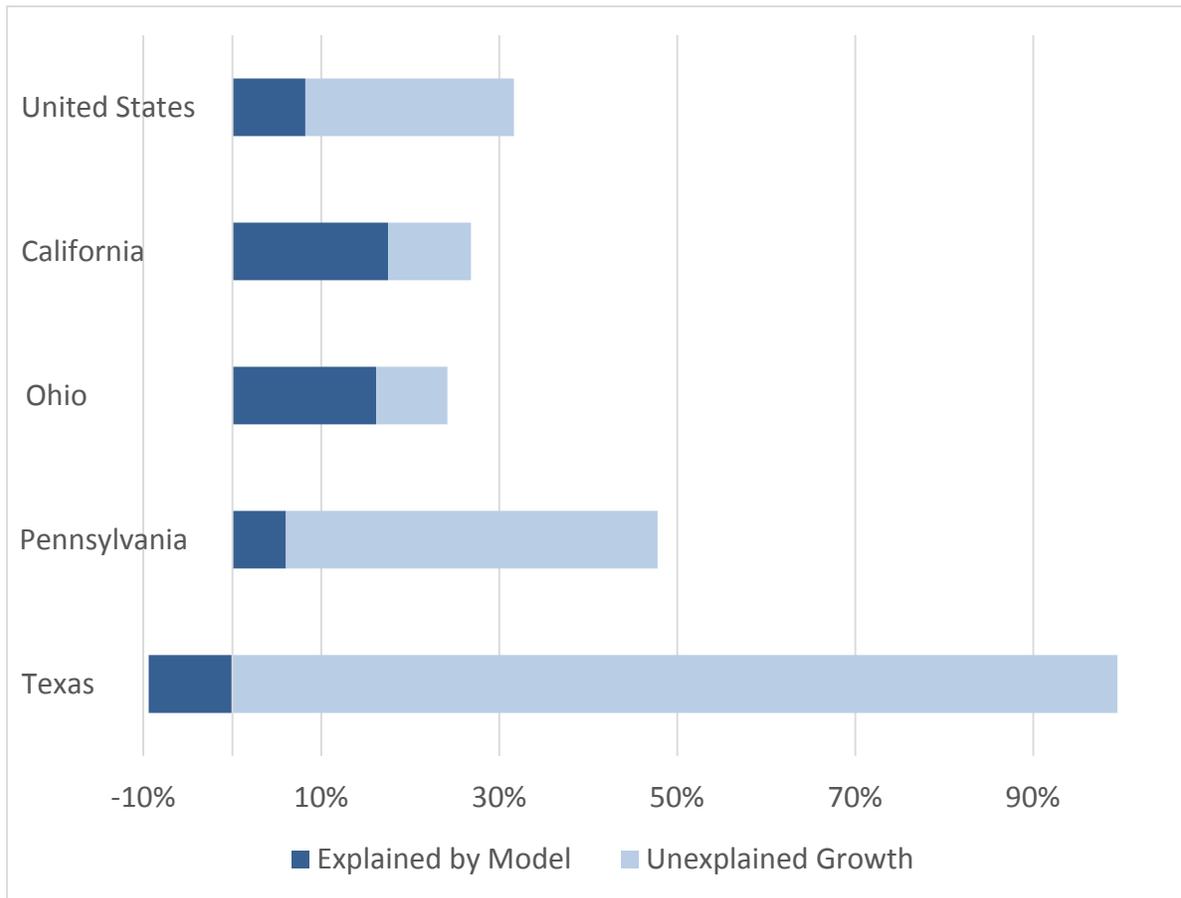
Figure 1. County-level variation in child SSI population ratios, 2013



Source: Wittenburg et al. (2015).

Note: SSI child population ratio is calculated by dividing the number of child SSI recipients (SSA 2014) by the number of children in the United States (U.S. Census Bureau, 2013).

Figure 2. Growth in the percentage of children receiving SSI nationally and from select states, 2003–2011



Source: Authors' analysis of state and county variation in child SSI receipt over time.

Notes: Percentages of children receiving SSI are generated from SSA administrative data on the number of child SSI recipients by county (numerator) and U.S. Census child population counts (denominator). Model variables include rates for ADHD, low birth weight, special education services, English language learners, poverty, unemployment, manufacturing jobs, and race.