

THE RISE IN SSI PARTICIPATION AMONG CHILDREN: ASSESSING THE IMPACT ON POVERTY AND LABOR SUPPLY

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Since its inception in the early 1970s, the federal government's Supplemental Security Income (SSI) program has provided cash benefits and Medicaid health insurance to low-income aged, blind, and disabled individuals. Both children and adults have always been eligible for this means-tested program, but throughout the 1970s and 1980s, adults were several times more likely to receive SSI. This disparity was partly attributable to the stricter medical eligibility criteria that the Social Security Administration (SSA) used in its disability determinations for children. For adults to meet the disability standard, they must be deemed unable to engage in any substantial work. In the 1990 Supreme Court case of *Sullivan v. Zebley*, the Court ruled that in order to meet the program's legislative standard of equal treatment, a functional limitation component comparable to that for adults must be included in the determination process for children. This decision had the effect of lowering the disability severity level required for children to be eligible for SSI benefits [U.S. GAO 1994, 1995].

At the time of the *Zebley* ruling, there were 265,000 children receiving SSI benefits, with this number having increased by less than 3 percent annually in the preceding three years. Seven years after the Supreme Court decision, the number of children on SSI had increased by 260 percent to more than 955,000. Though the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) tightened child eligibility criteria and effectively put an end to further expansion of SSI, the fraction of children receiving benefits today remains substantially higher than it was in 1989. SSI is now a major source of cash assistance for poor children. Between 1985 and 2003, owing to the concurrent rise in child SSI enrollment and the contraction of the welfare caseloads, the ratio of families on AFDC to families with a child on SSI fell from 16.1 to 2.2. If one additionally considers SSI receipt by adults, there are now slightly more children in households receiving SSI payments than in households receiving benefits from TANF.

In this paper we investigate the causes and consequences of the rise in child SSI participation. We first investigate the determinants of SSI caseload growth in order to determine who was affected by the rise in child SSI participation in the 1990s. We examine the relationship between SSI caseload growth and welfare caseloads and benefits. We also examine the relationship between county-level SSI caseload growth and county-level demographics. Having established who the affected populations are, we then discuss how the rise in child SSI participation can be expected to affect family poverty and labor supply. Using data from the U.S. census and March Current Population Survey (CPS), we empirically estimate the effect of SSI participation on family poverty and maternal labor supply.

Identifying a causal relationship between SSI participation and family poverty and labor supply is difficult for three main reasons. First, because the program is means-tested, there is a mechanical relationship between family resources and SSI participation. Second, the growth in child SSI enrollment occurred during the same period as welfare reform, the expansion of the Earned Income Tax Credit (EITC), growth in the adult SSI program, and other factors that make it difficult to disentangle its effect from the effect of these other factors. Third, the often-utilized approach to studying entitlement programs by exploiting state-level variation in program parameters is not feasible in the context of SSI because it is a federal program with very little variation in program parameters across states.

We employ an Instrumental Variables approach to overcome these identification issues and estimate a causal relationship between SSI participation and family outcomes (poverty and maternal labor supply). The underlying instrument is the triple-interaction between an indicator variable for being post-*Zebley*, an indicator variable for being a female-headed family, and a discrete variable for the number of boys in the family. This instrument is used to predict family SSI participation, which is then related to family poverty and maternal labor supply. Families headed by single mothers are much more likely to be low-income and on AFDC than are other families. The combined effect of the *Zebley* decision and welfare reform was to increase both the incentive and ability for low-income families to enroll in SSI. And indeed, families headed by single-mothers were substantially more likely to enroll in SSI during the 1990s than other families.

Furthermore, it is well-documented that boys are more likely than girls to experience mental disorders such as autism, attention deficit disorder, and antisocial personality disorder, to name just a few. Given that the post-*Zebley* expansion was driven by a rise in the number of recipients qualifying with mental disorders, it is thus not surprising that boys were substantially more likely than girls to enroll in SSI during this period. SSI enrollment data from this period reveals that the growth in SSI participation over the nineties was 85 percent greater for boys than for girls. It is thus the case that, controlling for mother's marital status, the gender composition of children, and year effects, we should observe single-mother families with boys having relatively higher rates of SSI participation post-1990. The triple interaction is thus a candidate instrument for child SSI participation, which is the endogenous regressor of interest.

The exclusion restriction necessary for this instrument to be valid is that this triple interaction does not predict poverty and maternal labor supply independent of its effect on child SSI participation. The key assumption of our identification strategy is that mother-only families with relatively more sons would have experienced the same change in poverty and labor supply as mother-only families with relatively fewer sons if not for differential rates of child SSI participation. Identification based on this instrument does *not* require that families with sons experience the same outcomes as families with daughters; however, it does require that baseline differences in outcomes sufficiently capture what differences would have been in the later period were it not for differential SSI participation. Furthermore, our identification strategy is valid even though a number of changes occurred during this period that differentially affected female-headed families. However, identification does require that other policy changes, such as welfare reform or the EITC expansion, did not affect mother-only families differently depending on

gender composition of children in the family. This assumption finds support in recent work suggesting children's sex has no effect on maternal labor supply (Lundberg and Rose (2002)).

Our empirical strategy also exploits heterogeneity in baseline welfare benefit levels across states. Compared to families living in states with high welfare benefit levels, families living in states with low welfare benefits would experience a much larger increase in transfer income if they moved a child from welfare to SSI. The effect of SSI participation on family outcomes thus depends on what the alternative is. That is, the effect depends on whether the family would otherwise participate in no cash assistance program, a financially-generous welfare program, or a less financially-generous welfare program. We empirically test how the estimated effect of SSI participation on family poverty and labor supply varies with state welfare benefit levels.

Our first set of empirical analyses addresses the question of who is driving the rise in child SSI participation. How SSI participation will affect family outcomes depends on who is being affected, or in other words, who the "treated" population is. We build on previous work that has demonstrated that SSI participation is to some extent a substitute for participation in AFDC or TANF (Kubik, 2003, 1999; Garrett and Glied, 2000; and Sevak and Schmidt, forthcoming). Using county-level data and controlling for state fixed effects, we find that child SSI participation grew most rapidly in counties with a relatively large fraction of poor children and with relatively many children living in female-headed households. The data also indicate that Hispanic children were less likely to have benefited from the expansion of child SSI participation than non-Hispanic children. Furthermore, children in low AFDC-benefit states were significantly more likely to enroll in SSI than children in high AFDC-benefit states.

Two observations in particular lead to the conjecture that the rise in child SSI participation contributed to the fall in child poverty and the increase in labor supply in female-headed households during the 1990s. First, SSI benefits are substantially greater than welfare benefits in the typical state. A shifting of children from AFDC to SSI could thus lead to substantial increases in the amount of transfer income received by poor families with children. Second, because the program's labor supply incentives are much stronger than those of the traditional welfare program, it is plausible that the shifting of children from AFDC to SSI could lead to a substantial increase in labor supply among single mothers.

Our second set of empirical results provide evidence that enrollment in SSI substantially lowers the probability that a child will be poor, with the estimates indicating a much larger effect in low AFDC-benefit states. Our estimates imply that for every five children made eligible for SSI, three are lifted above the poverty line. Our findings also suggest that the expansion of child SSI has increased maternal labor supply, with strong and statistically significant effects for the probability of work, number of weeks worked, and usual hours worked per week. Taken together, our results suggest that the expansion of child SSI during the 1990s contributed to the decline in child poverty and to the increase in labor supply among single mothers.

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