Fiscal Federalism and Welfare Policy: The Role of States in the Growth of Child SSI

Jeffrey D. Kubik
Department of Economics, Syracuse University, Syracuse, NY 13244

Abstract - The liberalization of the Supplemental Security Income (SSI) program in 1990 allowed many children receiving assistance from AFDC to enroll in SSI instead. Because of differences in the federal funding rules for these two programs, many state governments saved money by steering children from AFDC to SSI. I calculate this financial gain to states and present evidence that state fiscal considerations influenced the movement of children between welfare programs; states experiencing negative fiscal shocks were more likely to encourage these moves. These findings are important for predicting state responses to future adverse fiscal shocks in this post-welfare reform era.

INTRODUCTION

To administer most U.S. welfare programs, there are complicated relationships between the federal government and the states. Often, a federal agency sets broad outlines about how a program is to be managed and provides a portion of the money for its operation; the states then decide the exact structure of the benefits, deal with the recipients, and contribute the rest of the money.1 Researchers often exploit this cross-state variation in the configuration of poverty programs to measure how people respond to the incentives created by the presence of the welfare system; however, much less work has been done examining how fiscal federalism affects the structure of that system.2

How do states react, both in terms of how much assistance they give to the poor and how they shepherd participants

---

1 This description is closest to the administrative structure of the now defunct Aid to Families with Dependent Children (AFDC) program. Other major poverty programs also contain federal and state components. The federal government sets minimum eligibility and benefit standards for Medicaid. The states make final decisions on the services covered, the amount that health providers are reimbursed for those services, and the extent of the population eligible for benefits. Both levels of government share Medicaid costs. Even the Supplemental Security Income (SSI) program, although it is completely financed and all eligibility guidelines are set by the federal government, is partially administered by state agencies.

2 Studies that examine the effect of a federal system on welfare policy include Ladd and Doolittle (1982), Moffitt (1984), Sloan (1984), and Brown and Oates (1987).
through the welfare system, to the incentives the federal government creates when it changes the ground rules of a program? This question is especially important now that the recent radical welfare reform has profoundly altered the relationship between the federal government and the states, with decision-making power and financial obligations devolving from the federal level to the states. Assessing how state policy makers will react to these new incentives from the federal government is important for understanding what the welfare system will look like over the next several years.

Although the welfare reform legislation of 1996 is the largest recent reorganization of how the federal and state governments administer the welfare system, several previous policy changes have also altered the fiscal incentives that states face. This paper explores the expansion of the Supplemental Security Income (SSI) disability program for children in the early 1990s. After a Supreme Court mandated liberalization of the SSI disability standard in 1990 and a revision that same year of the procedures used to evaluate child mental disorder claims, SSI became a significant source of cash assistance for poor children. Caseloads swelled from under 300,000 in 1989 to over 900,000 at the end of 1994, and benefit payments increased from $1.2 billion to $4.5 billion per year. Over the same period, caseloads for AFDC increased from about 11 million to 14 million, and benefit payments increased from about $17 billion to $23 billion (U.S. House of Representatives, 1996).

This easing of eligibility requirements made SSI receipt a real alternative to AFDC participation for many low-income children, especially because SSI paid more generous benefits to recipients than AFDC. From a state’s fiscal perspective, the two programs also were not equivalent. Both the federal government and the states shared the cost of AFDC benefits; however, SSI benefits are paid entirely by the federal government. Therefore, states gained financially if a child transferred from the AFDC program to the SSI rolls.

This paper investigates the incentives states face in shifting welfare recipients between programs and examines empirical evidence to see if the fiscal concerns of states shape their reactions to federal welfare policies. My empirical strategy involves identifying states that were in fiscal distress and observing if those states tended to transfer more children from the AFDC rolls to the SSI program after the SSI liberalization of 1990. I assume that states in poor financial health are more likely to value the financial gain of shifting a child between programs and are therefore willing to bear the expense of identifying children participating in AFDC likely to be eligible for SSI and assisting them in applying for benefits.

Using state-level data on AFDC and SSI caseloads during the late-1980s and early-1990s, I find that states facing unexpected adverse revenue and expenditure shocks have a higher growth of their SSI rolls relative to the size of their AFDC population after the SSI expansion. This result is robust to several specification tests that isolate the effect of state fiscal shocks from other factors that affect SSI and AFDC caseloads. My evidence confirms that states do play a significant role in determining the welfare assistance that children receive and that fiscal incentives influence the choices that states make in structuring the mix of state and federal welfare programs available to children.

This evidence helps us to predict how states will respond to adverse fiscal shocks in this post-welfare reform era. Because

---

3 See Garrett and Glied (2000) and Kubik (1999) for an examination of the impact of the benefit differential between AFDC and SSI on the size of SSI caseloads.

4 States are allowed to supplement the federal SSI benefit. More detailed information on the funding process for SSI and AFDC is provided below.
the period immediately after welfare reform was a large economic expansion, we have no direct evidence of how states react in bad economic times to the incentives created by welfare reform. With the shift of federal welfare payments to states away from open-ended matching grants and toward capped block grants, states now bear the entire marginal cost of placing an extra family on the Temporary Assistance for Needy Families (TANF) rolls. My results suggest that such changes mean that states will now have an even larger incentive to move children away from state funded assistance programs and into federally financed programs such as SSI in economic downturns. Even though the 1996 welfare reform legislation contained provisions for curtailing the eligibility of children for SSI, increased efforts from states in economic downturns to identify children qualified for SSI receipt might hinder attempts to scale back the program.

THE SSI EXPANSION AND THE FUNDING RULES OF WELFARE PROGRAMS

SSI is a government transfer program for the low-income elderly and disabled, created in 1974 to federalize a patchwork of state assistance programs and administered by the Social Security Administration (SSA). Recipients must meet an income and asset test and applicants less than 65 years old must also pass a disability screening. Cash payments are relatively generous compared to other public transfer programs. Benefits consist of a monthly maximum federal grant, $531 for an individual in 2001, and an optional state supplement. About 20 states provide supplements to SSI children; however, many are only a few dollars per month. Recipients are also eligible for Food Stamps and Medicaid coverage.

The SSI Liberalization

Reflecting the fact that SSI was a program designed for adults, the SSI disability standard before the welfare reform of 1996 was defined in terms of how much a person’s impairment must hinder work capacity in order to be eligible for benefits. First, the SSA compared a person’s health condition with a list of conditions that automatically qualified the applicant for benefits; if the impairment was not listed, then the SSA had to determine if the ailment was severe enough to prevent the applicant from working. Because children are not expected to work, the SSA had to use a different standard for them. Before 1990, children were granted benefits only if their disability met the listing; however, the Supreme Court, in the case *Sullivan v. Zebley*, ruled that holding children to a stricter disability standard than adults was illegal. The court ordered the SSA to develop a second stage of evaluation, similar to determining if adults can work, to judge whether the impairment inhibits a child’s ability to pursue age-appropriate activities. Known as the Individualized Functional Assessment (IFA), for most children this activity was attending school.

The same year as the *Zebley* decision, the SSA released regulations revising the procedures used to evaluate child mental

---

5 In the mid-1990s, the family income limit for SSI eligibility was around $11,000 per year, and the liquid asset limit was $2,000. Benefits are indexed yearly for inflation and reduced as a recipient’s other income increases. Unlike AFDC, SSI benefits and income cut-offs are not adjusted for family size.

6 States are allowed to set more restrictive criteria for receiving Medicaid coverage than cash benefits from SSI. Twelve states set more binding standards for receiving Medicaid either by requiring a lower income limit or a higher disability standard than the cash benefit criteria.

7 As part of the *Zebley* settlement, the SSA agreed to allow children who applied for SSI during the previous ten years to reapply under the new standard and receive retroactive compensation if they were found eligible for benefits. About 300,000 children reapplied.
impairment cases. The new rules more clearly defined how the SSA considered claims of frequently diagnosed mental illnesses in children such as Attention Deficit Disorder and other developmental problems. The SSA also modified the type of evidence used to judge the damage of mental illness; less emphasis was placed on the testimony of medical professionals and more weight was given to the information parents, teachers and counselors provided about the child’s condition. As with the IFA, the new mental impairment regulations focused on how disabilities affected a child’s performance in school.

These changes transformed SSI into a major welfare program for children. After 1990, the number of child applicants for SSI more than quadrupled and the acceptance rate climbed from one-third to over one-half, allowing over 600,000 more children onto the SSI rolls. This liberalization also profoundly altered the case mix of the SSI population. Although the number of recipients in every diagnostic class rose significantly beginning in 1990, the growth in the number of children receiving SSI for mental conditions other than mental retardation dwarfs the increase of children with mental retardation and physical disabilities. The implementation of the IFA accelerated the movement of the case mix toward mental disorders. Over 80 percent of SSI applicants approved for benefit receipt at the new IFA stage suffered from mental impairments, and half of all allowances for mental disorders other than retardation were made at the IFA level (U.S. General Accounting Office, 1995).

Spurred by the burgeoning caseload and bad press, the federal government toughened some of the SSI disability standards for children as part of the 1996 welfare reform legislation. The new law creates a child disability definition that is independent of the adult standard, eliminating the need for the child standard to be considered legally comparable to the adult standard. The eligibility of hundreds of thousands of children already receiving SSI was reevaluated in 1997, and the SSA deemed over 90,000 children ineligible for continued assistance under the new disability definition.

Federal Funding Rules for Welfare Programs

Because federal law did not allow an individual to receive benefits from both AFDC and SSI, a state gained financially when a child receiving AFDC became eligible for SSI. The child was removed from the family assistance unit when calculating AFDC benefits; hence, the family was considered to have one fewer member. For example, a family that consists of a parent and two children would have received only the AFDC benefit for a two-person family if one of the children were found eligible for SSI. The implementation of the IFA accelerated the movement of the case mix toward mental disorders. Over 80 percent of SSI applicants approved for benefit receipt at the new IFA stage suffered from mental impairments, and half of all allowances for mental disorders other than retardation were made at the IFA level (U.S. General Accounting Office, 1995).

Federal Funding Rules for Welfare Programs

Because federal law did not allow an individual to receive benefits from both AFDC and SSI, a state gained financially when a child receiving AFDC became eligible for SSI. The child was removed from the family assistance unit when calculating AFDC benefits; hence, the family was considered to have one fewer member. For example, a family that consists of a parent and two children would have received only the AFDC benefit for a two-person family if one of the children were found eligible for SSI.9

Because states only paid a portion of AFDC benefit costs, they did not save all of the AFDC benefit that the family lost. The percentage of the benefit that a state paid, known as the state matching rate, was a non-linear function of a state’s per capita income relative to the average per capita income of the U.S.10 Also, some

---

8 See National Academy of Social Insurance (1996) for a breakdown of the impairment distribution of SSI recipients.
9 For all welfare benefit calculations, I assume that the family has no other income and therefore is eligible for the maximum benefits available in the state. Because both AFDC and SSI recipients were eligible for Medicaid and Food Stamps assistance, only the cash benefit changed for the family when a child switched programs. In every state, the SSI benefit gain was greater than the family’s AFDC benefit loss, so a family gained financially when a child became eligible for SSI.
10 The formula of the matching rate, which is the same as the formula used for the Medicaid program, was: State Match Rate = 0.45 × (State, per capita Income / U.S. per capita Income)². The minimum state matching rate was 18 percent and maximum was capped at 50 percent.
states supplement the federal SSI benefit. Therefore, the net gain for state $i$ moving a child onto SSI from a family of size $k$ was:

$$\text{Net State Gain}_i = (\text{State Matching Rate}_i \times \text{Family’s AFDC Benefit Loss}_{i,k}) - \text{State Supplement}_i.$$ 

For the state of Connecticut, for example, the state matching rate is 50 percent and the state supplement is zero. When a child from a three–person family left AFDC, the family lost $8,160 – 6,588 = 1,572 in AFDC benefits; therefore, the state government saved half of that loss, or $786. For a five–person family, the difference between the AFDC benefit for a five–person and a four–person family in Connecticut was somewhat smaller. The family lost $10,716 – 9,504 = 1,212 in AFDC benefits, saving the state $606.

THE EMPIRICAL STRATEGY

My approach for examining whether states play a large role in encouraging children from AFDC families to apply for SSI after the Zebley decision involves identifying states suffering fiscal pressures and asking whether those states are more likely to shift children between welfare programs. Using similar data and techniques as Poterba (1994), I calculate whether a state experiences an unexpected budget deficit or surplus in a fiscal year. Then I test whether the states in poor fiscal condition are more likely to have a substantial increase in the number of children receiving SSI benefits relative to the size of the AFDC population of the state in that year.

An assumption behind this strategy is that the welfare policy of states is a function of at least two factors: their views about the best ways to provide assistance to low–income families and the fiscal consequences of the structure of the welfare system. When a state experiences an adverse fiscal shock, it weighs the fiscal consequences more heavily when deciding its welfare policy and is more likely to take advantage of the fiscal benefit of shifting children across welfare programs.

The Data

I create an annual panel of the size of the AFDC and child SSI caseloads of all 50 states for the years 1986 through 1995 using data from SSA publications. For those same years, I construct measures of a state’s fiscal health using an approach similar to Poterba (1994). The National Association of State Budget Officers (NASBO) publishes information on the actual and projected revenues and expenditures of all state governments each fiscal year. The budget authorities of each state government make these projections. From these NASBO statistics, I calculate whether a state experiences an unexpected revenue and expenditure shock.

An unexpected revenue shock is the difference between the revenue the state actually collects in the fiscal year given the tax system of the state at the beginning of the fiscal year and the revenue it expected to collect before the start of the fiscal year. That is, the revenue shock for state $i$ in year $t$ is:

$$\text{State Revenue Shock}_{i,t} = \text{Actual State Revenues}_{i,t} - \text{Forecasted State Revenues}_{i,t},$$

States change their tax code in the middle of a fiscal year, often in response to a shortfall in revenues compared to expectations.

---

11 See National Association of State Budget Officers (various years) for a more detailed explanation of the state fiscal information used in this study.

12 All fiscal measures in this paper are converted to per capita measures by dividing by the population of the state that fiscal year.
This revenue shock measure does not include the revenue raised by these within-fiscal year changes.

Similarly, an unexpected expenditure shock in a state is the difference between the actual amount spent by the state government in the fiscal year and the projected expenditures before the fiscal year. Or:

\[
\text{State Expenditure Shock}_{i,t} = \text{Actual State Expenditures}_{i,t} - \text{Forecasted State Expenditures}_{i,t}.
\]

As with revenues, states change their expenditures during the middle of a fiscal year, again often because of fiscal problems. Unfortunately, unlike revenues, it is not easy to calculate what a state’s expenditures were without these changes; therefore, this state expenditure shock measure might be contaminated with the adjustments states make (including potentially changing welfare policy) in response to a state’s fiscal situation. I will examine how this potential problem affects my empirical work.

The measure of state fiscal stress that I use is the size of the state’s unexpected deficit:

\[
\text{Unexpected Deficit Shock}_{i,t} = \text{State Expenditure Shock}_{i,t} - \text{State Revenue Shock}_{i,t}.
\]

Positive values of Unexpected Deficit Shock mean that the state had a larger deficit or a smaller surplus than it anticipated at the beginning of the fiscal year; whereas, negative values suggest that the state had a smaller deficit or larger surplus than expected.

Fiscal stress varied greatly across states in the late 1980s and the early 1990s. For example, unexpected deficit shocks in 1995 ranged from $80 per capita in Washington to an unexpected surplus of $80 per person in Nevada. The recession in the early 1990s caused many states to have large unexpected deficits, as revenues were much smaller than expectations. Increased expenditures, sometimes caused by expansions in federal mandates, also caused some states to suffer fiscal crises. However, other states were relatively unscathed by these problems.

### Empirical Framework

The first step of my empirical work is to create a measure of the extent that welfare assistance to children shifted from AFDC receipt to SSI receipt in a state. I use the ratio of the number of children receiving SSI in the state and the number of families receiving AFDC assistance. That is:

\[
\text{Welfare Assistance Ratio}_{i,t} = \frac{\text{Children Receiving SSI}_{i,t}}{\text{Families Receiving AFDC}_{i,t}}.
\]

If a state moved a child from AFDC to SSI, this ratio increased. Figure 1 plots this proportion for the entire U.S. over the years 1986 through 1995. Not surprisingly, the ratio almost tripled between 1990 and 1995 as SSI caseloads grew after the Zebley decision. However, this increase varied significantly across states. For example, in 1989 both Maryland and California had a similar ratio of children on SSI to AFDC families; Maryland’s ratio was .056, and California’s was .044. By 1995, Maryland’s ratio had tripled to .165 while California’s had only grown to .082.

I examine if states that experienced fiscal problems were more likely to have an increase in their ratio of SSI recipients to

---

13 Because the denominator is the number of families that receive AFDC benefits and not the number of children that receive AFDC, it does not change when a child moves from the AFDC rolls to SSI.
AFDC families after the Zebley decision. My regression model takes the form:

\[ W_{i,t} = \alpha + \beta_1 U_{i,t} + \text{State}_i + \text{Year}_t + \epsilon_{i,t} \]

where \( \text{State}_i \) is a full set of state dummies, \( \text{Year}_t \) is a set of year effects, and \( \epsilon_{i,t} \) is an error term. \( \beta_1 \) is the coefficient of interest, and a positive value suggests that states in fiscal distress shift their welfare assistance for children toward SSI participation.

Because I include state and year effects in my regression specification, I am identifying the effect of state government budget considerations on the ratio of children receiving SSI to AFDC families from changes in a state’s fiscal condition and its welfare program caseloads that are different from the U.S. average. The challenge of my empirical work will be to demonstrate that I am capturing the relationship between state budgets and SSI caseloads and not measuring some other factor that affects both a state’s fiscal situation and poverty program participation simultaneously. For instance, changes in a state’s economy will affect its budget and the number of people that apply for income support programs. Much of my presentation of the empirical results will be geared toward separating the effect of state fiscal measures on SSI caseloads from these other explanations.

### The Means of States to Influence the Size of Welfare Caseloads

Before moving to the results of the empirical analysis, there is an important question about this strategy that needs to be addressed. What instruments under a state government’s control affect the number of children that apply for and receive SSI benefits? If I find that fiscal problems lead to movements of children onto SSI, is there evidence that states would have played a role in this movement instead of these movements just being the result of recipients’ decisions alone?

There are at least a couple of ways that states can attempt to funnel AFDC recipients onto the SSI rolls. Although the federal government sets the disability standard that is used to judge whether a child is eligible for SSI assistance, initial disability determinations are performed by state agencies under a contract with the SSA. There is variation across states in the resources used to evaluate disability claims by these state agencies, and there is be-
lieved to be wide differences in the rigor of these agencies in applying the federal disability standard.\textsuperscript{14} States may try to be more lenient in deciding child SSI disability claims to help the state coffers.

Also, states can begin programs for combing through their AFDC rolls to identify the recipients most likely to be eligible for SSI benefits. After a child is discovered as being potentially eligible for benefits, the state can then assist the family in preparing an application for SSI. Several states have started extensive programs to identify potential SSI recipients. For example, Texas hired a consulting firm to determine which children participating in AFDC were receiving special education instruction in school. Once these children were discovered, Texas caseworkers helped the families of these children through the SSI application process, especially encouraging them to appeal initial negative decisions. The state estimated that it would save $5,000,000 per year from these procedures by the year 2000.\textsuperscript{15}

Studies have examined previous methods that states have used to move people, usually adults with disabilities, onto the SSI rolls. This work typically finds that many potential SSI recipients know little about the program and that outreach campaigns can steer many recipients into the program whom otherwise would not have applied.\textsuperscript{16} Other work has shown that states respond to fiscal crises by altering other specific spending programs.\textsuperscript{17}

\section*{RESULTS}

Table 1a presents the means and ranges of the state–level variables used in the empirical analysis for the years after the \textit{Zebley} decision used in this analysis, 1991 through 1995. Along with the state welfare program caseloads and fiscal condition measures discussed above, I also display the descriptive statistics of two measures of state economic conditions: the unemployment rate and per capita income.\textsuperscript{18} The table shows that there is wide variation in the data in the size of the movement of children onto the SSI rolls after the \textit{Zebley} decision across states.

There is similar dispersion in the fiscal condition of states; some experience large unexpected surpluses while others suffer deficits in the early 1990s. Table 1b shows the yearly means of the fiscal condition measures. The large deficits occurred on average early in the sample period, during the recession of the early 1990s. Table 1c shows the geographic variation in the fiscal measures; reflecting the fact that the recession was larger for states on the two coasts than states in the middle of the country, the table shows that the largest deficits were concentrated in New England and Western states.

\begin{itemize}
\item \textsuperscript{14} These state agencies also evaluate initial disability claims for adults applying for SSI and for benefits from Social Security Disability Insurance. See Parsons (1991) and Gruber and Kubik (1997) for studies that examine across–state differences in disability claim adjudication. The SSA has quality control procedures to monitor these state agencies. However, these checks are imperfect, especially in the early 1990s when they were swamped with millions of child SSI applications.
\item \textsuperscript{15} See State of Texas (1995) for a full description of the Texas program.
\item \textsuperscript{16} Bound, Kossoudji and Ricart–Moes (1998) follow the state of Michigan’s plan for moving recipients of their General Assistance (GA) program to the SSI program after the state decided to phase out its GA program. Michigan created a large outreach campaign to help their former GA recipients, providing them with doctors to consult and other counselors to help with the SSI application process. Lewin–VHI, Inc. (1995) surveys the efforts of six states, including Michigan, to teach their residents more about the federal disability programs for which they are potentially eligible. They conclude that a substantial proportion of the growth of the adult SSI program in the 1980s and 1990s is due to state efforts to advertise the program and reduce their GA rolls.
\item \textsuperscript{17} For example, Humphreys (2000) finds that states cut back funding for public higher education when states have budget problems, and Alm, McKee, and Skidmore (1993) find some evidence that states are more likely to enact a lottery during times of fiscal pressure.
\item \textsuperscript{18} All variables expressed in dollars are adjusted to 1990 dollars using the CPI.
\end{itemize}
My strategy for presenting the empirical results is to first show the regression estimates from the basic model that measures the effect of fiscal conditions on a state’s welfare program caseload mix. I next examine the sensitivity of these results to alternative empirical specifications. Then I measure how fiscal conditions affect the average number of children in an AFDC family in a state, and I finally examine some auxiliary results of my work.

The Basic Model

Column (1) of Table 2 reports the results of the estimation of the basic regression specification of equation (6) for the post-Zebley sample years of 1991 through 1995. The coefficient on the per capita unexpected deficit measure is positive and statistically different from zero at standard significance levels, implying that states that suffer an adverse deficit shock are more likely to have an increase in their SSI caseloads.
TABLE 1C

<table>
<thead>
<tr>
<th>Region</th>
<th>Per Capita Unexpected Revenue Shock</th>
<th>Per Capita Unexpected Expenditure Shock</th>
<th>Per Capita Unexpected Deficit Shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England</td>
<td>68.58 [269.63]</td>
<td>10.21 [39.64]</td>
<td>–22.85 [120.46]</td>
</tr>
<tr>
<td>(1)</td>
<td>40.57 [105.94]</td>
<td>31.30 [102.09]</td>
<td>18.15 [64.39]</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td></td>
<td>6.17 [54.48]</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td>32.06 [82.52]</td>
<td>24.87 [39.61]</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>17.56 [76.13]</td>
<td>–12.34 [32.04]</td>
<td>41.03 [76.40]</td>
</tr>
<tr>
<td>(3)</td>
<td>–9.27 [20.43]</td>
<td>–22.49 [42.73]</td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>28.66 [82.52]</td>
<td>–7.19 [28.34]</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain</td>
<td>32.06 [105.94]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>10.21 [39.64]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific</td>
<td>–22.85 [120.46]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Standard deviations are in brackets. Observations are weighted by the child population of the state when calculating means and standard deviations. Fiscal variables and per capita income are expressed in 1990 dollars using the CPI.
caseload relative to the size of their AFDC population. The magnitude of the coefficient is not economically trivial; it suggests that increasing a state’s unexpected deficit by one standard deviation, about $50 per person, increases the state’s Welfare Assistance Ratio by about 0.007, or about 4.3 percent of the population–weighted mean of the ratio for the post–Zebley sample period.

Because the results from the basic regression model indicate a strong relationship between a state’s fiscal condition and the SSI and AFDC caseload mix of the state, it is important to rule out stories that might produce spurious associations between these two measures. The most obvious potential problem is that state government fiscal circumstances and poverty program participation are both affected by the economy of the state; the systematic relationship between fiscal measures and the welfare caseload mix might just reflect this correlation with changes in the state economy.

The first method I use to determine if this problem is driving my results is to include measures of state economic conditions as controls in my basic regression. Column (2) of Table 2 presents the results of the specification that includes the state’s unemployment rate for the year and a measure of its per capita income. Lower unemployment and higher per capita income raise the ratio of SSI participants to AFDC families in a state, but only the effect of per capita income is statistically different from zero. However, the coefficient on the unexpected deficit shock is qualitatively unchanged from the estimate in column (1). Including several years of lags of these state economy variables also does not affect the coefficient on the unexpected deficit variable. I also try state–level measures of the economy that more accurately reflect the condition of the poor in a state, such as the poverty rate. Again, such controls do not change the regression results.

However, it can be argued that these measures of the state economy are too crude to adequately control for business cycles. Therefore, it is useful to think through how such a bias of not being able to separate the effect of state fiscal crises from state economic conditions could affect my estimates. While it is clear that a recession

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>THE EFFECT OF STATE FISCAL MEASURES ON THE RATIO OF CHILD SSI RECIPIENTS TO AFDC FAMILIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1991–1995 Sample</td>
</tr>
<tr>
<td></td>
<td>1986–1989 Sample</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Per Capita Unexpected Deficit Shock</td>
<td>.1480</td>
</tr>
<tr>
<td></td>
<td>(.0549)</td>
</tr>
<tr>
<td>State Unemployment Rate</td>
<td>−.0007</td>
</tr>
<tr>
<td></td>
<td>(.0041)</td>
</tr>
<tr>
<td>State Per Capita Income</td>
<td>.0511</td>
</tr>
<tr>
<td></td>
<td>(.0096)</td>
</tr>
<tr>
<td>Region × Year Effects?</td>
<td>No</td>
</tr>
<tr>
<td>Observations</td>
<td>250</td>
</tr>
</tbody>
</table>

19 All of the regressions are weighted by the child population of the state. Results for unweighted regressions are similar.

20 Including several years of lags of these state economy variables also does not affect the coefficient on the unexpected deficit variable. I also try state–level measures of the economy that more accurately reflect the condition of the poor in a state, such as the poverty rate. Again, such controls do not change the regression results.

21 However, it can be argued that these measures of the state economy are too crude to adequately control for business cycles. Therefore, it is useful to think through how such a bias of not being able to separate the effect of state fiscal crises from state economic conditions could affect my estimates. While it is clear that a recession
some states in the West had only modest increases in SSI caseloads. If at the same time Southern states were experiencing regional fiscal troubles that did not influence the growth of SSI, then I could measure a spurious effect of fiscal deficits on SSI growth relative to AFDC. Column (3) of Table 2 presents the results of the basic regression specification that include Region Dummy \times Year Dummy interaction terms.\(^{22}\) In this model, the effect is identified by within-region changes in a state’s fiscal conditions and welfare caseloads. The estimated effect of an unexpected deficit shock is about one-third smaller in column (3) than the basic result in column (1). However, the coefficient is still marginally statistically different from zero and not statistically different than the coefficient for the basic regression. Therefore, my results do not appear to be driven by regional differences in reactions to the Zebley decision.

A final concern about the basic regression results is that they might not be measuring the effect of state fiscal problems on the movement of children onto the SSI rolls but instead the effect of these fiscal crises on state manipulation of the AFDC rolls alone. When states are suffering fiscally, they might pare back AFDC participation without trying to move children onto SSI. Under such a circumstance, there would still be a positive association between unanticipated fiscal deficits and the Welfare Assistance Ratio.

To test for this possibility, I first estimate the basic regression specification using data from a sample period before the Zebley liberalization of SSI eligibility. If states are only adjusting their AFDC caseloads, then there should be a similar effect of fiscal shocks both before and after the Zebley decision. However, if states are encouraging the movement of children out of AFDC and into SSI because of fiscal problems, then there should only be a positive effect of deficit shocks after the Zebley decision, when the disability eligibility rules were liberal enough to allow many children to receive SSI. Column (4) of Table 2 reports the results of the basic regression specification of equation [6] for a sample from 1986 to 1989.\(^{23}\) There is not a positive effect of deficit shocks on the Welfare Assistance Ratio for this pre-Zebley sample; in fact, there is a marginally statistically significant negative effect, although the coefficient is much smaller in absolute value than the estimated effect for the post-Zebley sample. Because the relationship between the caseload mix and fiscal crises is only apparent after the Zebley decision, this suggests that I am measuring movements in SSI caseloads and not just state adjustments of the size of AFDC rolls.

\[ \text{in a state will increase the number of people that apply for and receive SSI and AFDC, it is less clear how economic downturns should affect the ratio of the number of children on SSI to the number of families receiving AFDC. Because eligibility for AFDC was based mostly on the economic circumstances of the family but SSI eligibility contains both economic and health requirements, AFDC would seem to be the more countercyclical program. The coefficients on unemployment and per capita income in column (2) of Table 3 also suggest that the AFDC rolls grew more rapidly than SSI caseloads in a state during recessions and that there is a negative association between the Welfare Assistance Ratio and state recessions. Because economic downturns are positively correlated with state fiscal crises, then standard omitted variable bias analysis suggests that, without proper controls for the state economy, I am actually estimating a lower bound of the effect of fiscal shocks on the welfare caseload mix.}\]

\(^{22}\) The region dummies are the nine Census divisions: New England (CT, ME, MA, NH, RI, VT), Middle Atlantic (NJ, NY, PA), South Atlantic (DE, FL, GA, MD, NC, SC, VA, WV), East South Central (AL, KY, MS, TN), East North Central (IL, IN, MI, OH, WI), West South Central (AR, LA, OK, TX), West North Central (IA, KS, MN, MO, NE, ND, SD), Mountain (AZ, CO, ID, MT, NV, NM, UT, WY), and Pacific (AK, CA, HI, OR, WA) states.

\(^{23}\) NASBO state fiscal data are only available for this analysis starting in 1986. NASBO state fiscal data were also missing for Alaska for two years and for Louisiana and Alabama for one year each during this 1986–1989 period.
One potential problem with this check, however, is that it assumes that states possessed the same ability to manipulate the AFDC rolls before and after the Zebley decision. Because the federal government increasingly granted waivers to states that allowed them to change their AFDC programs in the early 1990s, states might have had more opportunities to respond to fiscal shocks by adjusting the AFDC rolls during this time. Therefore, finding these differences in the pre– and post–Zebley samples might only reflect that the ability of states to move families out of AFDC after deficit shocks have grown and not that states are shifting children into SSI.

To check for this possibility, I estimate the effect of deficit shocks on SSI and AFDC caseloads separately for the two time periods. The results are presented in Table 3. Columns (1) and (2) show the effect of deficit shocks on the logarithm of the number of child SSI recipients in a state before and after the Zebley decision. There is no effect of deficit shocks on SSI caseloads before 1990; however, there is a large positive and statistically significant effect of these shocks using the post–Zebley sample. The coefficient on the deficit shock after the Zebley decision suggests that a one standard deviation increase in the unexpected deficit of a state, about $50 per person, increases the child SSI caseloads by about 1.2 percent. This implies an increase in SSI caseloads during this time period of slightly fewer than 20,000 child recipients.

Columns (3) and (4) present similar results using the logarithm of the number of AFDC families as a dependent variable using both sample periods. In both cases, deficit shocks have small and imprecisely estimated effects on AFDC caseloads. The coefficient on deficit shocks is smaller using the post–Zebley sample, suggesting that states might have had more flexibility in the early 1990s to decrease the AFDC in response to fiscal shocks; however, the difference between the coefficients is too small and imprecisely estimated to determine anything definitive. But there is strong evidence that deficit shocks affected SSI caseloads after the Zebley decision and did not just affect the AFDC rolls.

### Different Specifications of Fiscal Shocks

The result that adverse unexpected fiscal shocks are associated with a movement of state welfare assistance of children toward SSI receipt is robust to several methods of accounting for state economic conditions. Now I test the sensitivity of my findings to different specifications of state fiscal shocks. My measure of the size of the unexpected deficit shock of a state for the basic regressions is calculated from reports of a state’s projected and actual revenues and expenditures as described in the previous section. First, I examine how my results change if I split up the unexpected deficit shock measure into some of these various components.

<table>
<thead>
<tr>
<th></th>
<th>SSI Children</th>
<th>AFDC Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Capita Unexpected Deficit Shock</td>
<td>.2452</td>
<td>-.0271</td>
</tr>
<tr>
<td>(</td>
<td>(.0881)</td>
<td>(.0229)</td>
</tr>
<tr>
<td>Observations</td>
<td>250</td>
<td>196</td>
</tr>
</tbody>
</table>

Notes: The dependent variable in columns (1) and (2) is the log of the number of child SSI recipients in a state. The dependent variable in columns (3) and (4) is the log of the number of AFDC families in a state. All regressions include state effects and year effects and are weighted by the child population of the state. Standard errors are in parenthesis. Per capita fiscal measures are divided by 1,000.
In column (1) of Table 4, I present the estimates of the regression of the *Welfare Assistance Ratio* on measures of a state’s *Unexpected Revenue Shock* and *Unexpected Expenditure Shock* separately in the specification for the post–Zebley sample period. Consistent with the story that states encourage the growth of SSI caseloads while experiencing fiscal problems, unexpected revenue shocks have a negative and statistically significant from zero effect on the *Welfare Assistance Ratio*, and unexpected expenditure shocks have a positive effect. The sizes of the two coefficients are comparable in absolute value; also encouraging is that they are very similar to the size of the coefficient on the *Unexpected Deficit Shock* variable in column (1) of Table 2. Decomposing the value of unexpected deficit shocks into less restrictive measures of fiscal stress does not affect my basic findings.

Finally, I described above how there is a potential problem in the measurement of expenditure shocks in a state. The amount that a state spends in a year includes changes in spending that occurred during the fiscal year, possibly in response to fiscal problems. Therefore, the expenditure shock might not be an exogenous measure of the fiscal health of the state. To address this concern, I use an instrumental variable strategy. The revenue shock measure does not suffer from this potential endogeneity problem; therefore, I instrument a state’s *Unexpected Deficit Shock* measure with its *Unexpected Revenue Shock*. Column (2) of Table 4 reports the results of this estimation. Again, there is a positive and statistically significant from zero effect of deficit shocks on the *Welfare Assistance Ratio*; the instrumented coefficient for unexpected deficits is slightly larger than the coefficient for the basic regression in Table 2.24 This estimate suggests that a one standard deviation increase in a state’s per capita deficit raises the ratio of children receiving SSI to families on AFDC in a state by about 0.01, or 6.3 percent of the post–Zebley mean of the *Welfare Assistance Ratio*. Therefore, it does not appear that this potential endogeneity problem is substantially biasing my results.

### The Effect of Budget Institutions and Politics

Now I examine whether differences in the budget institutions and political circumstances of states affect how they respond to fiscal shocks. States with more

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>THE EFFECT OF STATE FISCAL MEASURES ON THE RATIO OF CHILD SSI RECEPIENTS TO AFDC FAMILIES—SPECIFICATION CHECKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Split Revenues and Expenditures</strong></td>
<td><strong>IV with Unexpected Revenues</strong></td>
</tr>
<tr>
<td><strong>(1)</strong></td>
<td><strong>(2)</strong></td>
</tr>
<tr>
<td>Per Capita Unexpected Deficit Shock</td>
<td>.2081</td>
</tr>
<tr>
<td></td>
<td>(.1057)</td>
</tr>
<tr>
<td>Per Capita Unexpected Revenue Shock</td>
<td>-.1436</td>
</tr>
<tr>
<td></td>
<td>(.0553)</td>
</tr>
<tr>
<td>Per Capita Unexpected Expenditure Shock</td>
<td>.1256</td>
</tr>
<tr>
<td></td>
<td>(.0644)</td>
</tr>
<tr>
<td>Observations</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>250</td>
</tr>
</tbody>
</table>

Notes: The dependent variable is the ratio of child SSI recipients to AFDC families in a state. All regressions include state effects and year effects and are weighted by the child population of the state. Standard errors are in parenthesis. Per capita fiscal measures are divided by 1,000.

24 The coefficient for the *Unexpected Deficit Shock* variable is statistically significant from zero in the first stage. The t-statistic is –11.024.
stringent balanced–budget institutions are more likely to have to substantially decrease spending in response to a deficit shock, suggesting that these states would be more likely to encourage the transfer of children to SSI when they experience fiscal problems.

The Advisory Commission on Intergovernmental Relations (1987) categorized all of the budget rules of states and assigned a score between 1 and 10 for each state that characterizes the stringency of their balanced–budget rules (1 the weakest and 10 the strictest). Using this score measure, I decompose the effect of deficit shocks for weak and strong balanced–budget states. Similar to Poterba (1994), I classify states with a score of 6 or higher as having strong balanced–budget rules and other states as having weak rules. I then add an interaction of the unexpected deficit shock of a state with an indicator for whether the state has strong balanced–budget rules to my standard regression specification of equation [6]. This result is shown in column (1) of Table 5. The estimate of interest is the interaction term, which is positive, large, and statistically different than zero at the 14 percent level of significance, suggesting that states with strict budget rules encourage the shifting of children onto SSI more than other states. Using a similar regression specification, I find in column (2) of Table 5 that states with Republican governors encourage the shifting of children to SSI more than other states when experiencing fiscal problems.

Average Number of Children in AFDC Family

If what I am measuring is that states in fiscal trouble encouraged the movement of children from AFDC to SSI after the Zebley decision, then I should also observe that the average number of children receiving AFDC per family receiving AFDC fell in those states. Table 6 presents the results of regressions of equation [6] with the dependent variable now a state’s Average Number of Children in AFDC Families, which is the average number of children receiving AFDC per AFDC family. The basic regression result for the post–Zebley sample period is shown in column (1). The estimate suggests that states suffering an unexpected adverse deficit shock experience a decline in the average number of children that received AFDC per AFDC family. The size of the coefficient implies that a one standard deviation increase in a state’s unexpected deficit decreases the

| TABLE 5 |
|---|---|---|---|
| **THE EFFECT OF STATE BUDGET RULES AND GOVERNOR PARTY AFFILIATION ON THE REACTION OF STATES TO FISCAL SHOCKS** |
| Budget Rules (1) | Governor’s Party (2) |
| Per Capita Unexpected Deficit Shock | .0553 | .0949 |
| | (.0835) | (.0680) |
| Deficit Shock × Stringent Budget Rules Indicator | .1552 | −.0069 |
| | (.1057) | (.0078) |
| Indicator for Republican Governor |  | .1545 |
| |  | (.1024) |
| Deficit ShockRepublican Governor |  |  |
| |  |  |
| Observations | 250 | 250 |

Notes: The dependent variable is the ratio of child SSI recipients to AFDC families in a state. All regressions include state effects and year effects and are weighted by the child population of the state. Standard errors are in parenthesis. Per capita fiscal measures and state per capita income are divided by 1,000.
ratio of child AFDC recipients to AFDC families by 0.008, or about 4 percent of the population weighted mean of the ratio in the post–Zebley sample. Column (2) of Table 5 shows that the measured effect of unexpected deficits does not qualitatively change when state economy controls are added.

As an additional check of whether changes in state economic characteristics are driving my results, I examine whether deficit shocks affect the Average Number of Children in AFDC Families during the pre–Zebley sample period. If my previous estimates are capturing the effect of children moving from the AFDC program to SSI, then there should be little effect of deficit shocks on the ratio of AFDC children to AFDC families before the Zebley decision. However, if I am measuring the effect of economic downturns on this ratio, then I should observe a similar effect of unexpected deficit shocks for both the pre– and post–Zebley sample periods. Column (3) reports the regression estimates using the years 1986 through 1989. Because the coefficient on deficit shocks is small and not significantly different from zero for this time period, it appears that my post–Zebley results are measuring the movement of children from AFDC to SSI.

### Other Results

The fiscal deficit measure I use above is a gauge of how far off a state’s forecasts were from its actual revenues and expenditures. A state could have a large unexpected deficit even though it experiences a budget surplus; the surplus just was not as large as the state projected. It is easy to imagine that states that suffer an unexpected deficit might react much differently if they experience a budget deficit than if they still experience a surplus. The need for states to cut back expenditures might be much smaller if the adverse fiscal shock still does not put the state into the red.

I investigate whether states have different reactions, in terms of the propensity to shift the mix of welfare assistance toward SSI receipt, to unexpected fiscal shocks depending on how that shock affects their overall budget. The regression model I use is a variation of the basic model of equation [6]; I add an interaction of the unexpected deficit measure with an indicator for whether the state experiences a deficit in the fiscal year. The coefficient of interest is on the interaction; it measures whether states are more sensitive to fiscal shocks when the shock either moves them into deficit or exacerbates an existing deficit.

---

**TABLE 6**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td><strong>Per Capita Unexpected Deficit Shock</strong></td>
<td>−.1510</td>
<td>−.1395</td>
</tr>
<tr>
<td></td>
<td>(.0809)</td>
<td>(.0806)</td>
</tr>
<tr>
<td><strong>State Unemployment Rate</strong></td>
<td>−.0099</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.0065)</td>
<td></td>
</tr>
<tr>
<td><strong>State Per Capita Income</strong></td>
<td>−.0322</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.0154)</td>
<td></td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>250</td>
<td>250</td>
</tr>
</tbody>
</table>

Notes: The dependent variable is the ratio of child AFDC recipients to AFDC families in a state. All regressions include state effects and year effects and are weighted by the child population of the state. Standard errors are in parenthesis. Per capita fiscal measures and state per capita income are divided by 1,000.
Table 7 reports the results of this specification. In column (1), the sample is the post–Zebley period of 1991 through 1995. The coefficient on the unexpected deficit shock variable measures the impact of the shock when a state is in surplus; it is positive but very small and not statistically different from zero. However, the coefficient on the interaction term is positive, large, and statistically significant from zero, implying that states are more likely to encourage the movement of children across welfare programs when a deficit shock creates a deficit or worsens an existing deficit in the state. As a check of this specification, I present the results for the pre–Zebley sample in column (2) of Table 7. Not surprisingly, there is no effect of deficit shocks on the Welfare Assistance Ratio in this period and no significant difference in the effect if a state is in surplus or in deficit.

### CONCLUSION

The results of this paper indicate that state fiscal concerns influence the type of welfare assistance that children receive. If a state suffered an adverse deficit shock in the early 1990s, poor children were more likely to move into SSI and away from AFDC participation. This finding is robust to several methods of controlling for economic conditions in a state and specifying its fiscal condition. A deficit shock in a state already suffering fiscally accelerates the movement of children into SSI much more than in a state that is relatively healthy.

This evidence is consistent with the conclusion that state governments respond to the financial incentives of the funding rules of welfare programs. States gained financially when they steered children into the federally financed SSI program and away from the partially state financed AFDC program. When the benefits of these savings were most acute for states during budget crises, they increased their efforts to foster this movement of children.

Accounting for these incentives is important for analyzing how states will react to welfare reform. Although many researchers are studying the consequences of welfare reform, because until recently the U.S. economy has grown strongly since 1996, we have no direct evidence on how states will respond to economic downturns in this new era. The recent welfare reform shifts the entire marginal cost of placing a family on the TANF rolls to the states. This modification of the welfare funding rules increases the financial gain to states of encouraging children to

### Table 7

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Capita Unexpected Deficit Shock</td>
<td>.0393 (0.0725)</td>
<td>–.0157 (0.0800)</td>
</tr>
<tr>
<td>Indicator that State is Experiencing a Deficit</td>
<td>–.0081 (0.0050)</td>
<td>–.0002 (0.0011)</td>
</tr>
<tr>
<td>Unexpected Deficit × Deficit Indicator</td>
<td>.3310 (0.1047)</td>
<td>.0135 (0.0114)</td>
</tr>
<tr>
<td>Observations</td>
<td>250</td>
<td>196</td>
</tr>
</tbody>
</table>

Notes: The dependent variable is the ratio of child SSI recipients to AFDC families in a state. All regressions include state effects and year effects and are weighted by the child population of the state. Standard errors are in parenthesis. Per capita fiscal measures are divided by 1,000.
apply for SSI benefits and suggests that they might increase such efforts even more when experiencing fiscal pressure.

But changes to these funding rules are not the only way that welfare reform could promote these state ventures. The federal government has also established targets on the percentage of TANF recipients that must be working or in work programs that states must meet to continue to receive full federal TANF funding. States might want to assist families that are difficult to place in work programs in obtaining alternative welfare assistance such as SSI so that it is easier to meet such targets. Such considerations indicate that, even though the federal government has attempted to rein in the growth of the SSI program, many children, aided by states, might continue to seek SSI benefits, especially during economic downturns.

Although my findings suggest that this change to block grant funding for TANF will increase the incentive of states to promote the SSI program, my empirical analysis does not calculate the sensitivity of state responses to changes in the percentage of welfare benefits funded by the federal government. Such an estimate would be useful to more accurately predict the generosity of state TANF plans after welfare reform. The state matching rate provides across–state variation in the percentage of AFDC benefits that the federal government gave a state; however, that rate was an exact function of the state’s per capita income, making it difficult to separate effects of changes in a state’s matching rate and its economy. A clever method of isolating the effect of matching rates would be very useful for analyzing the influence of fiscal federalism on welfare programs.

Acknowledgments

I thank Jonathan Gruber, James Poterba, members of the MIT Public Finance Lunch, and seminar participants at Syracuse University for helpful comments and discussions. The National Institute on Aging provided financial support for this work.

REFERENCES


---

25 There is anecdotal evidence that some welfare recipients are avoiding these work requirements by receiving SSI assistance and forgoing the TANF benefits they would be entitled to receive. See New York Times, October 16, 1997.
Fiscal Federalism and Welfare Policy

Humphreys, Brad.

Kubik, Jeffrey D.

Ladd, Helen, and Fred Doolittle.

Lewin–VHI, Inc.

Moffitt, Robert.

National Academy of Social Insurance.
“Restructuring the SSI Disability Program for Children and Adolescents.” Report from the Committee on Childhood Disability to the Disability Policy Panel of the NASI, 1996.

National Association of State Budget Officers.

Parsons, Donald.

Poterba, James.

Sloan, Frank.

Social Security Administration.
State Assistance Programs for SSI Recipients. Baltimore, MD, various years.

State of Texas.

U.S. General Accounting Office.

U.S. House of Representatives.