

# Is There A Rural Disadvantage in Reducing Welfare and Food Stamp Participation in Mississippi and South Carolina?

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*Rural areas in Mississippi and South Carolina have had more difficulty than urban areas in reducing both cash assistance and food stamp program participation. These rural disadvantages might be overcome by improvements in rural transit to link rural residents to urban jobs and by increased child care and job training in rural counties.*

Where welfare and food stamp recipients live may affect how caseloads change in response to policy initiatives or economic conditions. For example, rural-urban differences in rates of program participation might be expected if barriers to moving off public assistance—such as lack of public transit, inadequate child care, and limited access to job training—are greater in rural counties than in urban counties.

The former open-ended welfare program, Aid to Families with Dependent Children (AFDC), became a block grant program, Temporary Assistance to Needy Families (TANF) in October 1996. We test for location effects—in Mississippi and South Carolina—on caseload changes from the new program using an empirical model that controls for trends in the vitality of the local (county) economy, trends in the "opportunity costs" (minimum-wage earnings, cash assistance, and

the Earned Income Tax Credit) to the welfare recipient of not entering the workforce, and changes in welfare policy. Caseload changes appear to be sensitive both to the strength of the State economy and the changing incentives embodied in the welfare reforms in each State.

## Recent Caseload Trends In Mississippi And South Carolina

Using within-State analysis allows us to capture the effect of local labor market conditions on welfare and food stamp participation decisions. We found that reducing both welfare and food stamp participation rates is more difficult in rural counties than in urban counties in Mississippi and South Carolina. Reducing caseloads is assumed to be consistent with anti-poverty programs aimed at reducing the need for cash assistance and food stamps by improving human capital endowments and stimulating the demand for labor.

## Mississippi Caseloads

**Welfare.** AFDC/TANF caseloads (Statewide) declined 43.8 percent from the pre-TANF period (October 1991 - September 1996) to the post-TANF period (October 1996 - April 1999)—53,272 cases to 31,123 cases. This decline was steady for all three groups studied—metro (51.6 percent), rural adjacent (43.5 percent), and rural nonadjacent (40.6 percent). The metro share of State caseloads dropped by almost four percentage points.

Consequently, the rural share of State caseloads increased from 59 percent to 62 percent, although the adjacent county share remained essentially unchanged. Unemployment rates also declined over the 1990s, reflecting robust State and national economies (fig. 1). However, there is no clear correlation between welfare caseload changes in Mississippi and monthly unemployment rates.

**Food stamps.** Like welfare caseloads, food stamp caseloads have

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Figure 1  
**Mississippi AFDC/TANF caseloads by residence, 1991-99**  
*Caseloads declined sharply across all counties*

been declining in Mississippi, but at a significantly lower rate--25 percent versus 44 percent from 1991 to 1999 (fig. 2). Food stamp trends also reveal little correlation to fluctuations in unemployment rates. Mean monthly food stamp declines (from the pre-TANF to post-TANF periods) were 28 percent for metro counties, 27 percent for rural adjacent, and 23 percent for rural non-adjacent counties. In contrast to welfare cases, where the rural share of total cases increased after welfare reform, food stamp shares by county group were essentially unchanged.

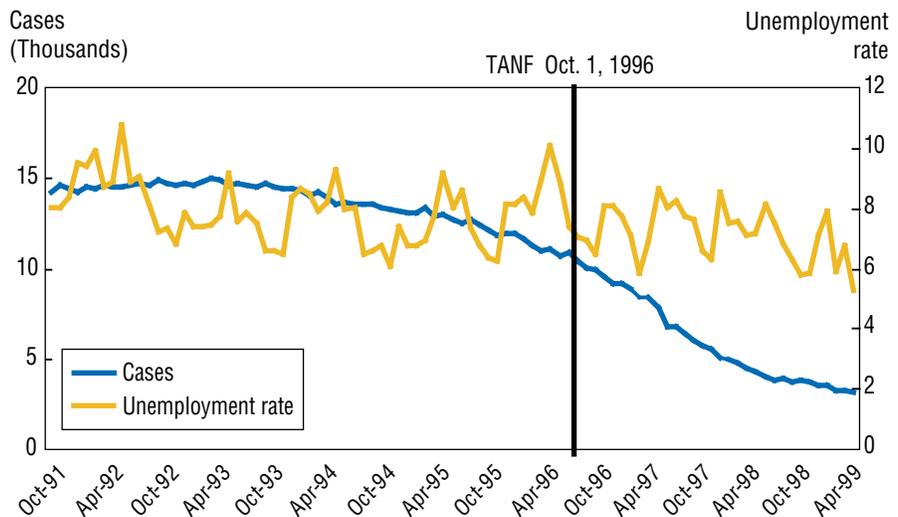
**South Carolina Caseloads**

**Welfare.** Monthly average caseloads across all counties in South Carolina declined 31.6 percent from the pre-TANF to the post-TANF period—47,610 cases to 32,566 cases. Caseloads in metro counties declined 29.1 percent, while rural counties (adjacent and nonadjacent) had average caseload declines of about 35 percent (fig. 3).

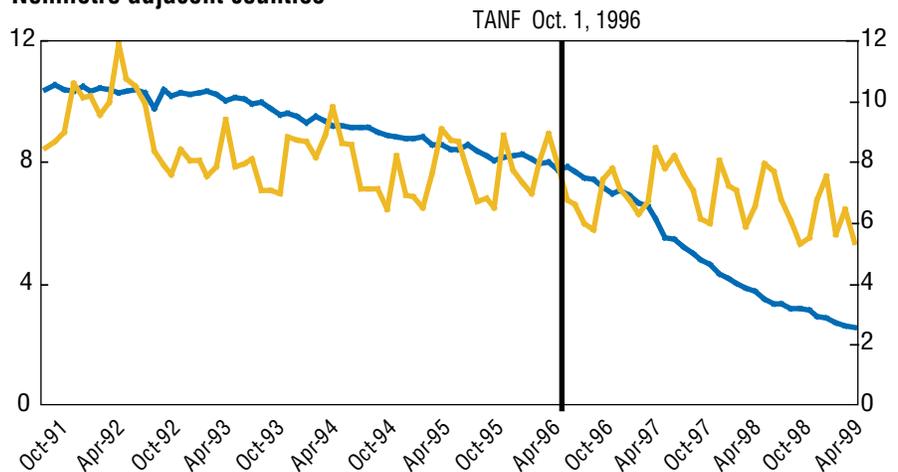
A majority of South Carolina welfare caseloads are in metro counties, while rural counties have most of the welfare cases in Mississippi. South Carolina trends imply that the robustness of county economies is correlated with post-TANF changes in caseloads. In each county group, the mean unemployment rate has declined since October 1996. Welfare caseloads moved lower in tandem with these lower unemployment rates. In South Carolina, the rural share of welfare caseloads fell from 43 to 41 percent after 1996.

**Food stamps.** In contrast to the dramatic declines in welfare caseloads, South Carolina food stamp caseloads remained stable even as unemployment rates dipped in the mid-1990s. No apparent reduction

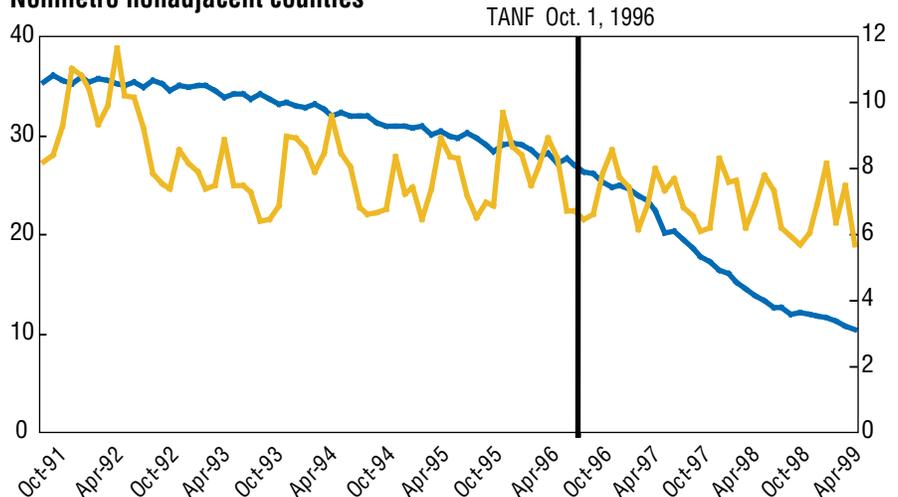
**Metro counties**



**Nonmetro adjacent counties**



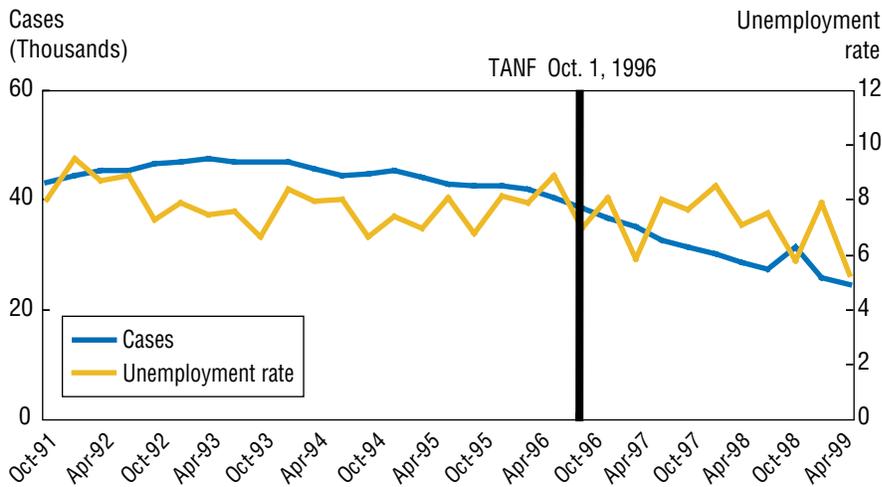
**Nonmetro nonadjacent counties**



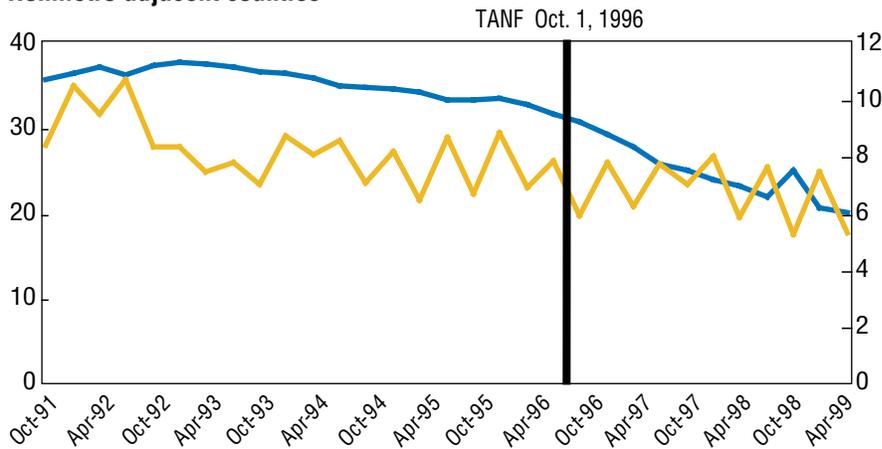
Source: Mississippi Department of Human Services, Mississippi Employment Security Commission.

Figure 2  
**Mississippi food stamp caseloads by residence, 1991-99**  
*Caseloads declined moderately across all counties*

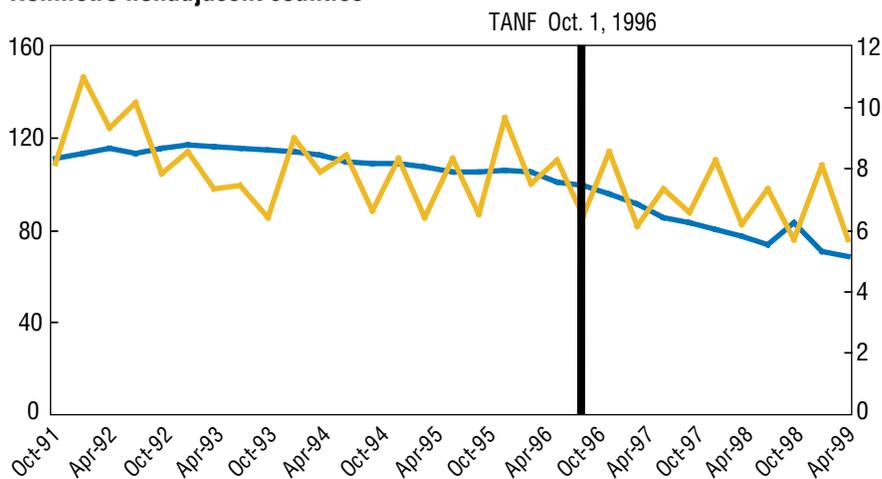
**Metro counties**



**Nonmetro adjacent counties**



**Nonmetro nonadjacent counties**



in caseloads occurred after TANF—especially in the rural counties (fig. 4). The mean number of metro county food stamp caseloads declined by only 3 percent from the pre-TANF to the post-TANF period. In rural counties, the decline was a mere 1 percent. Since TANF does not end food stamp eligibility and many of the jobs taken by former TANF recipients are in entry-level, service-sector jobs, it is not surprising that many former welfare clients draw on food stamps to help cover the basic cost of living.

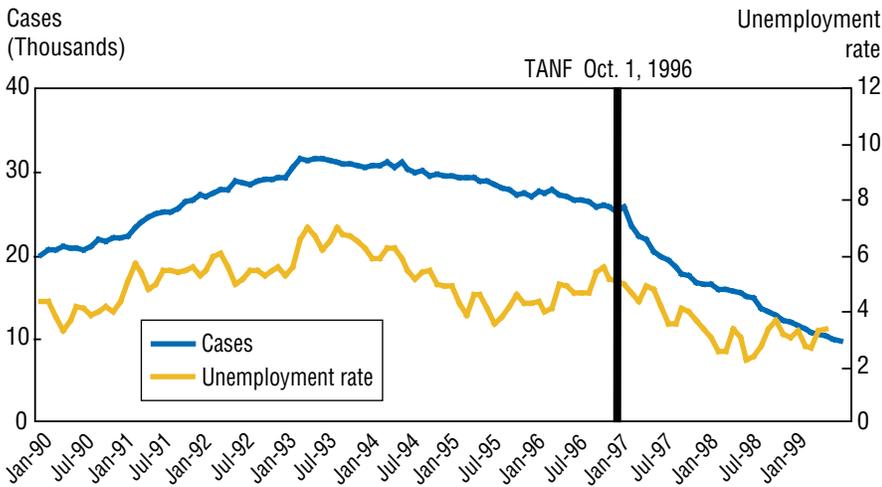
However, as TANF caseloads decline, some former welfare recipients fail to maintain participation in the Food Stamp Program (FSP). Zedlewski and Brauner find a link between the decline in welfare caseloads and recent reductions in FSP participation. Comparing FSP exit rates using the 1997 National Survey of America's Families, they conclude that welfare recipients (starting in 1995) leave the FSP at higher rates than nonwelfare recipients.

Notably, rural counties in South Carolina do not seem at a disadvantage in reducing caseloads. In fact, the State share of caseloads in rural counties is smaller after TANF than before. However, in most cases, population and the associated resident labor force are growing faster in metro counties than in rural counties so that caseloads per capita are increasing in rural areas relative to urban areas. In the next section, an explicit test for rural-urban differences in welfare and food stamp participation rates (caseloads per capita) controls for the strength of the county economy, opportunity costs of staying on welfare, and the effect of TANF reforms.

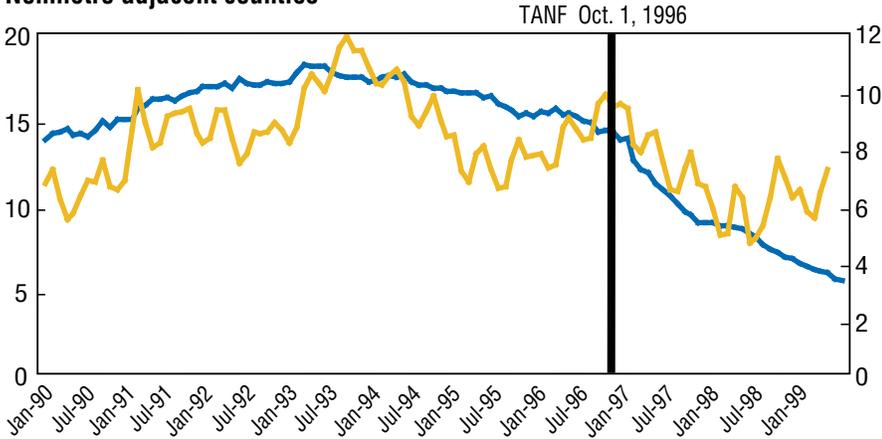
Source: Mississippi Department of Human Services, Mississippi Employment Security Commission.

Figure 3  
**South Carolina AFDC/TANF caseloads by residence, 1990-99**  
*Caseloads declined sharply after TANF*

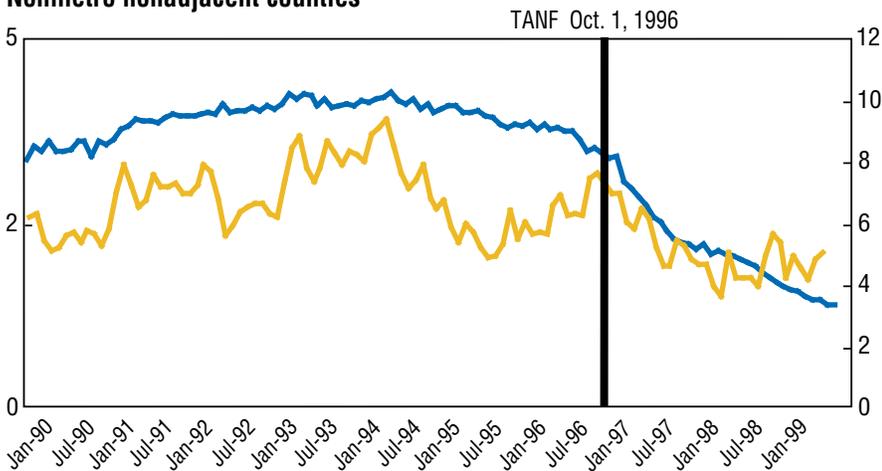
**Metro counties**



**Nonmetro adjacent counties**



**Nonmetro nonadjacent counties**



Source: Mississippi Department of Human Services, Mississippi Employment Security Commission.

**Key Determinants of Caseload Changes**

The effect of rising "opportunity costs" on AFDC/TANF caseloads shows that, as expected, increasing the EITC and the minimum wage relative to cash assistance reduces welfare participation. These results are statistically significant across all models estimated for South Carolina and Mississippi.

In both States, TANF policy impacts on caseloads occur in conjunction with a strong local economy. While the TANF indicator variable does not show a significant effect in either State, the interaction of TANF with the local economic variables was important in explaining caseload change. This indicates that TANF incentives to leave welfare (or not to participate in the welfare program) are most effective if the local economy is generating local job opportunities. Ellwood also finds the TANF effect to be strongest where a robust local economy offers more low-wage jobs to former welfare clients.

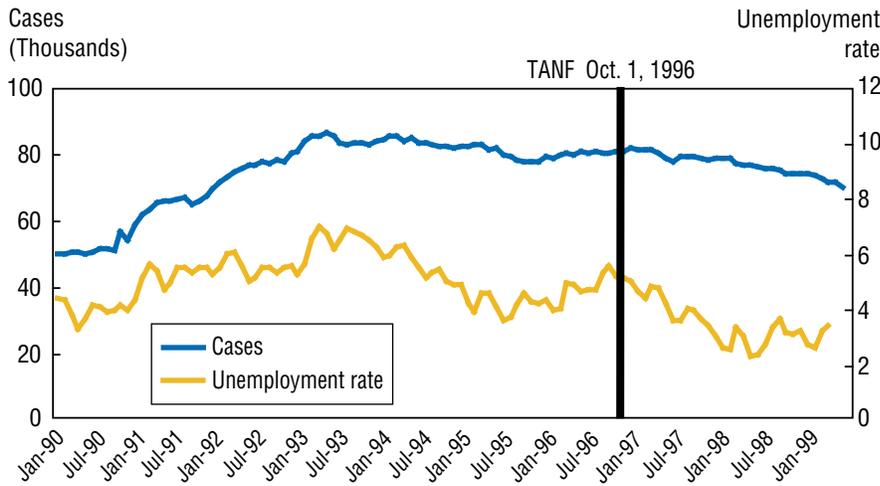
In South Carolina, lower unemployment rates reduce caseloads, and the effect of lower unemployment rates on caseloads is about twice as strong after TANF than before. Prior research by the Council of Economic Advisors indicates that employment growth affects welfare participation decisions but that there is a lag between the labor market signal and caseload changes. In South Carolina and Mississippi, faster employment growth reduces caseloads as expected, but there is about a 3-month lag between a stronger local economy and caseload declines.

Overall, faster job growth in South Carolina reduces welfare caseloads, and the job growth impact on caseloads has been

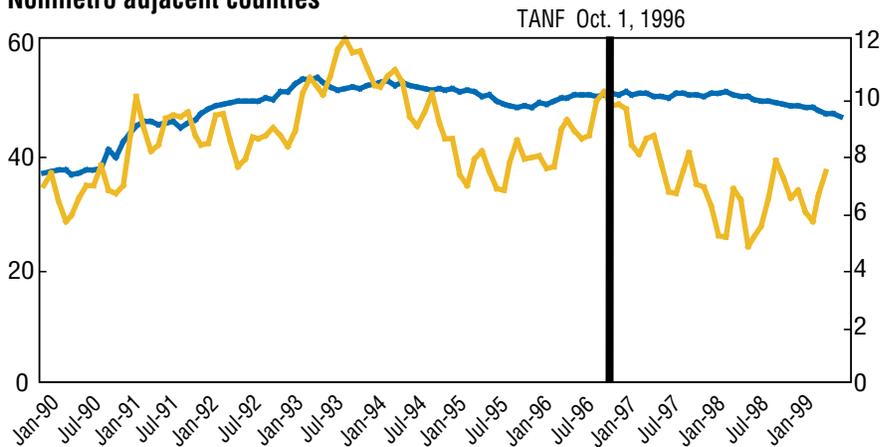
Figure 4  
**South Carolina food stamp caseloads by residence, 1990-99**

*Caseloads change little after TANF*

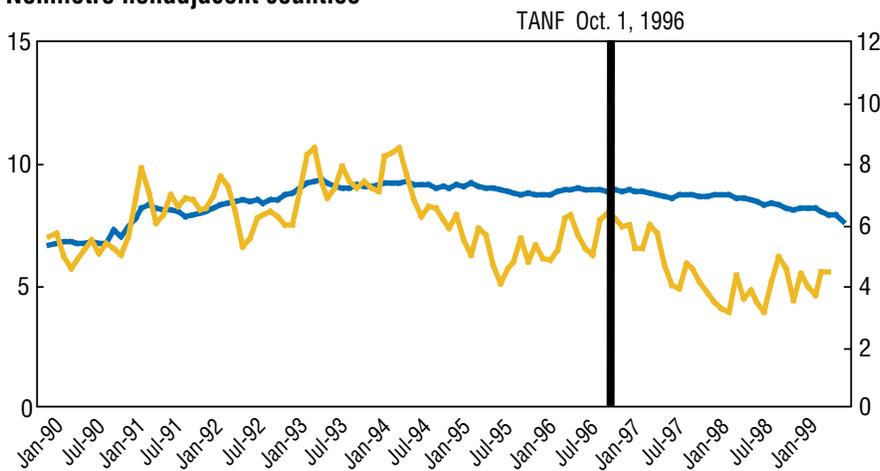
**Metro counties**



**Nonmetro adjacent counties**



**Nonmetro nonadjacent counties**



stronger since TANF. However, a 1-year lag in employment growth may induce immigration by low-wage households seeking jobs, who continue to draw welfare benefits for a period.

In Mississippi, both one-quarter and four-quarter lagged job growth reduced caseloads as expected. Like South Carolina, faster job growth after TANF increased the rate of decline in welfare caseloads. The Mississippi results indicate that both a strong economy and the implementation of welfare reform have contributed to declines in welfare participation rates.

**Is There a Rural Disadvantage in Reducing Welfare Caseloads?**

Model results indicate a strong metro advantage in reducing welfare participation in both South Carolina and Mississippi, other things equal. Welfare caseload participation rates are higher in non-metro counties than metro counties, after controlling for local economic vitality, TANF policy effects, and the rising opportunity cost of staying on welfare. A slightly greater disadvantage in reducing caseloads is apparent in rural counties not adjacent to a metro county.

Mixed results were obtained for the two States according to the dominant economic base in the county. Farm-based economies in both South Carolina and Mississippi had higher rates of welfare participation relative to other rural counties. In Mississippi, service-based rural economies also had high rates of welfare participation.

Economic regions within each State affect welfare participation. In South Carolina, the I-85 growth corridor in the northwest corner of the State is dominated by a diverse manufacturing sector, with BMW, Hitachi, and Michelin providing a

high profile for international investors. The region has a rapidly expanding service sector serving a growing population. Other regions--with the exception of the spillover Charlotte, North Carolina region--have higher rates of welfare participation than the I-85 growth corridor, and are part of the persistent-poverty band across the Southeast. Rural counties in these economic regions will likely have the most difficulty in reducing welfare caseloads.

In Mississippi, the Jackson economic region was used as a reference region. Three regions differed significantly from the Jackson area. Two regions had lower levels of welfare participation—a corridor of development activity paralleling an interstate highway from Jackson to Meridian, and an area benefiting from rapid growth in light industry, particularly upholstered furniture manufacturing. A third region, the high-poverty region of the Mississippi Delta, had notably higher numbers of welfare cases than the Jackson base and was dependent on production agriculture. These spatial breakdowns confirmed that caseload participation rates are significantly higher in nonmetro areas, all else the same, and farm-dependent areas face the most difficult challenges in reducing caseloads in both States.

### **Food Stamp Participation in South Carolina and Mississippi**

Results for FSP participation in South Carolina and Mississippi differ from the cash assistance results. This is not surprising given the small changes in FSP caseloads compared with the dramatic reductions in AFDC/TANF over the reviewed period. Higher minimum wages and increases in the EITC in both States tended to lower total

FSP participation. However, for South Carolina residents receiving food stamps without cash assistance, the relationship reverses. Possibly they view the higher minimum wage and higher EITC benefits, along with food stamps, as a "work support package." As the minimum wage and EITC increased, fewer people entered welfare but more signed on for the FSP.

Focusing on the South Carolina food stamp cases, TANF has a negative, but insignificant, impact on FSP caseloads and seems to have only a weak effect during quarters when employment is growing. On the other hand, rapid employment growth in the prior year seems to increase current-period FSP caseloads. This suggests that there is immigration to high-employment growth counties, with added demand for food stamps, at least for a time. Employment growth in the most recent quarter reduces FSP caseloads. It may be that not enough time has passed between this quarterly signal of job growth in a county and subsequent immigration of food stamp participants.

In Mississippi, the effects of TANF on food stamp caseloads were considerably smaller relative to the welfare caseload results. This is not surprising given the eligibility link between food stamp benefits and income as well as other eligibility requirements. That is, as income levels increase, individuals can remain eligible for some level of benefits as long as they remain below 130 percent of the poverty level and meet other necessary requirements. In contrast to South Carolina, the effect of TANF implementation is highly significant and negative in all the Mississippi food stamp models, indicating that program changes have contributed to declining food stamp participation

The impact of employment growth, lagged one and four quarters, on food stamps paralleled the findings for welfare caseloads. Results from unemployment lagged 12 months and the lagged unemployment-TANF interaction terms indicate that lower unemployment rates reduce food stamp caseloads.

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Except for the case of the one government-dependent county in South Carolina, all rural counties in both States, regardless of location or economic base, fare worse than metro counties in reducing the rate of food stamp participation. Mirroring the South Carolina welfare caseload results, counties in the economic regions outside the I-85 manufacturing belt depend more on the food stamp program to supplement incomes of the working poor. Economic regions in Mississippi also showed results similar to the welfare caseload analyses. Farm-based counties had higher FSP participation rates.

### **Conclusion**

Evidence for these two southern States suggests that rural areas will have more difficulty than urban areas in reducing both cash assistance and food stamp program participation. Improved transit link-

### Tests for a "Rural Disadvantage" in Caseload Change

The "rural disadvantage" hypothesis is examined using an econometric model of caseload change, for both welfare and food stamps, along the lines of one developed by the Council of Economic Advisors (CEA), 1999. The food stamp model is similar to the welfare caseload model for two reasons. First, across most States, there has been a strong correlation between food stamp and AFDC/TANF caseload changes. Second, important changes in food stamp policy took effect in 1997, roughly the same time as TANF (Zedlewski and Brauner). The caseload participation rate—the number of caseloads in a county divided by the county labor force—is the dependent variable. To explain why caseload participation rates may have changed over time, three groups of 'explanatory variables' are used in the regression model. These include: "opportunity cost" variables, TANF/economy variables, and region identifiers to test for rural-urban differences in caseload participation rates, holding other factors constant.

### "Opportunity Cost" Influences on Caseload Change

The first opportunity cost variable, the value of the earned income tax credit (EITC), has been assigned an important role in reducing caseloads by Ellwood. Its value increased substantially over the 1990s, encouraging welfare recipients to join the workforce. As the value of the average maximum EITC increases, caseloads should decline because more earned income will be lost by remaining on welfare.

The second opportunity cost variable is the monthly value of State minimum wage divided by the maximum monthly AFDC/TANF cash assistance benefits for a family of three. Because many former welfare clients begin work in the low-wage segment of the labor market, changes in the minimum wage serve as a good proxy for the expected wage income for former welfare participants who enter the labor market. By comparing this expected wage income from working to the cash assistance forgone by leaving welfare, welfare recipients can estimate the expected net income benefits from voluntarily leaving AFDC/TANF. However, we cannot test for the effects of varying benefits levels across counties because nominal cash assistance benefits are approximately constant across counties. Instead, the ratio of the minimum-wage monthly equivalent to the benefit level over time was used as one proxy for the changing opportunity cost to welfare recipients.

### TANF/Economy Influences on Caseload Change

Several welfare policy variables are constructed to test for the effect that TANF reforms have had on changes in caseloads, holding constant opportunity costs, the strength of the county economy, and urban-rural location of the welfare recipients. Tests of the effect of the TANF reforms at the county level in the two States are made using three variables. First, a simple test for a discrete change in caseloads before and after TANF is made. This discrete effect—

independent of the strength of the local economy—might arise from aspects of the TANF reforms that reflect new sanctioning rural residents to urban job growth may be needed to reduce rural caseloads, in addition to more widely available childcare, job training, and other assistance.

Most of the employment growth in both Mississippi and South Carolina has been concentrated in urban counties and rural counties along the Atlantic and Gulf coasts. The most remote rural counties have not benefited as much from State economic growth. As caseloads rise in the next recession,

States will have three options under TANF rules: "cut people off even though jobs may not be available, relax the time limits, or provide some form of subsidized work for those that cannot get private employment" (Ellwood, p. 193). States like South Carolina and Mississippi, with pockets of rural poverty, may be hard pressed to support low-income households if State revenues are not growing and the TANF block grant is fixed.

As a caveat, South Carolina and Mississippi have few metro areas with urban core counties that have large concentrations of poverty and TANF dependence. Given the evidence in Smith and Woodbury that urban core cities do worse than suburbs or non-urban areas in providing jobs for low-wage labor, a test for caseload change between rural areas and the urban core would be useful and best undertaken in States that have larger metro areas. [RA](#)

rules, time limits, and efficiencies or "cultural" reforms in how the local welfare agencies provide services to welfare clients under TANF versus AFDC.

Next, a second welfare policy variable tests the proposition that TANF reforms are likely to reduce caseloads only in conjunction with a robust county economy that provides job opportunities to former welfare clients. Simply put, welfare reform may provide a host of incentives to exit welfare but if no jobs are waiting, one would not expect the caseloads to decline. As the county economy strengthens (unemployment rates fall), caseloads are expected to decline.

The role of the local economy in caseload change is also captured in a second variable—the employment growth rate for the county. Employment growth is a good indicator of how well the local economy is doing in generating new jobs for welfare leavers and those that might be new entrants to the welfare program. In contrast, the unemployment rate reflects household decisions on labor force participation and underlying population change as well as local job generation. Faster local job growth should reduce welfare caseloads—a negative parameter is expected for the employment growth variable. As before, if TANF reforms are most effective when jobs are more plentiful, then the interaction effect between local employment growth rates and TANF should be significant and the parameter estimate should be negative.

#### **Regions Used to Test for Rural-Urban Differences in Caseload Change**

Several regression models are estimated to reflect alternative ways to define "rurality" using *alternative* dummy variables representing location effects. In the first regression, a simple indicator variable identifies counties as either metro or nonmetro. The second regression tests for a "remote" rural disadvantage by dividing the nonmetro counties into those adjacent and not adjacent to metro counties. Welfare participants in counties more distant from urban job centers may have less access to jobs than welfare participants in counties near urban counties. A third regression divides the nonmetro counties into one of four economic base groups: farm, manufacturing, government, or other (services and nonspecialized) (Ghelfi and Parker). Positive parameters on these dummy variables would indicate that counties in these classes are less likely to reduce welfare participation rates than are urban counties, given the same vitality of the local economy, opportunity cost of not working, and policy regime.

Finally, each State was divided into functional economic regions (economic areas developed in Johnson). These regions have an urban center county and rural hinterland counties that are connected by substantial within-region commuting. Regions with a booming urban center that offer jobs to residents of nearby rural areas are expected to have more success in reducing rural caseloads than other regions.

#### **For Further Reading . . .**

Council of Economic Advisors, "The Effects of Welfare Policy and the Economic Expansion on Welfare Caseloads: An Update," Technical Report, Washington, DC, 1999.

David T. Ellwood, "Anti-Poverty Policy for Families in the Next Century," *Journal of Economic Perspectives*, Vol. 14, No. 1, 2000, pp. 187-198.

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Kenneth P. Johnson, "Redefinition of the BEA Economic Areas," *Survey of Current Business*, Vol. 75, No. 2, pp. 75-80.

David M. Smith and Stephen A. Woodbury, "Low Wage Labor Markets: The Business Cycle and Regional Differences," *The Low-Wage Labor Market: Challenges for Economic Self-Sufficiency*, 1999. <http://aspe.hhs.gov/hsp/lwlm99/smith.htm>

Sheila R. Zedlewski and Sarah Brauner, "Declines in Food Stamp and Welfare Participation: Is There A Connection?" Discussion Paper 99-13, Washington, DC: Urban Institute, 1999.