



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

United States
Department of
Agriculture



Economic
Research
Service

Economic
Research
Report
Number 92

February 2010

Changing Participation in Food Assistance Programs Among Low-Income Children After Welfare Reform

Jessica E. Todd, Constance Newman, and Michele Ver Ploeg



Visit Our Website To Learn More!

For more ERS research and analysis on food assistance, see:

**[www.ers.usda.gov/Briefing/
FoodNutritionAssistance/](http://www.ers.usda.gov/Briefing/FoodNutritionAssistance/)**

National Agricultural Library Cataloging Record:

Todd, Jessica E.

Changing participation in food assistance programs among low-income children after welfare reform.

(Economic research report (United States. Dept. of Agriculture. Economic Research Service) ; no. 92)

1. Food relief—United States. 2. Poor children—United States.
3. Public welfare—United States.

I. Newman, Constance. II. Ver Ploeg, Michele. III. United States. Dept. of Agriculture. Economic Research Service.

IV. Title.

HV696.F6

Recommended citation format for this publication:

Todd, Jessica E., Constance Newman, and Michele Ver Ploeg. *Changing Participation in Food Assistance Programs Among Low-Income Children After Welfare Reform*, ERR-92, U.S. Dept. of Agr., Econ. Res. Serv., Feb. 2010.

Cover photo credit: ImageSource.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

The USDA logo features the letters "USDA" in a white serif font, positioned above a stylized white graphic of a field or waves.

United States
Department
of Agriculture

Economic
Research
Report
Number 92

February 2010



A Report from the Economic Research Service

www.ers.usda.gov

Changing Participation in Food Assistance Programs Among Low-Income Children After Welfare Reform

Jessica E. Todd, jtodd@ers.usda.gov

Constance Newman, cnewman@ers.usda.gov

Michele Ver Ploeg, sverploeg@ers.usda.gov

Abstract

In 1996, the safety net for poor households with children fundamentally changed when Federal legislation replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance for Needy Families (TANF). This study investigates participation in, and benefits received from, AFDC/TANF and food assistance programs, before and after the legislation, for children in low-income households (income below 300 percent of the Federal poverty line). The results show that, between 1990 and 2004, the share of children receiving food stamp benefits declined, most notably among children in the poorest households (income below 50 percent of the Federal poverty line). The share of children receiving benefits from the school meals programs and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) rose, mainly among children in low-income households with income above the Federal poverty line. Overall, the share of children in households that received benefits from AFDC/TANF or food assistance programs grew from 35 percent to 52 percent. However, the net result of these changes is that average total inflation-adjusted household benefits from all programs examined declined. The decline was largest among children in the poorest households.

Keywords: Food Stamp Program, SNAP, food assistance, welfare reform, WIC, school meals, National School Lunch Program, School Breakfast Program, TANF, AFDC, multiple program use, Survey of Income and Program Participation

Acknowledgments

The authors are grateful to Susan Hauan and Laura Chadwick, both of the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, for providing guidance and input during the early stages of this project and for reviewing the report. The authors also thank Kenneth Hanson (Economic Research Service), Nancy Cole (Mathematica Policy Research, Inc.), and Christopher R. Bollinger (University of Kentucky) for their insightful comments and suggestions. Participants at the 2009 Population Association of America Conference and the 49th Annual Workshop of the National Association for Welfare Research and Statistics also provided helpful feedback. Linda Hatcher provided excellent editorial assistance, and Susan DeGeorge provided design assistance.

Contents

Summary iii

Introduction 1

AFDC/TANF and Food Assistance Programs: Changes and Links 3

 AFDC/TANF Participation 3

 FSP Participation 4

 School Meals and WIC Participation 5

 Links Between AFDC/TANF and Food Assistance Programs 6

 Multiple Program Participation 6

Data and Methodology 8

 Data 8

 Sample 8

 Program Measures 9

 Underreporting Error 10

Changes in Program Participation and Beneficiary Characteristics . . 11

 Program Participation and Average Monthly Benefit Amounts 11

 Changes in Beneficiary Characteristics 11

 Multiple Program Participation and Average Monthly
 Benefit Amounts 15

 Income From Transfers by Pre-Transfer Household Income 19

 Turnover Rates by Program 22

Discussion and Directions for Future Research 25

References 26

Appendix 30

Summary

The 2008 poverty rate for children (19 percent) exceeded the poverty rates for working-age adults (12 percent) and the elderly (10 percent). Many federally funded assistance programs target low-income children with food assistance, cash assistance, tax credits, health insurance, child care, and housing. Even after the value of benefits from these programs is counted, about one in seven children still lives in poverty. Historically, Aid to Families with Dependent Children (AFDC) formed the base of public assistance to poor children, while the benefits from other programs filled in gaps for specific needs like food and health insurance. In 1996, the safety net for poor households with children fundamentally changed when the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) replaced AFDC with Temporary Assistance for Needy Families (TANF). TANF eliminated entitlement to welfare and gave States broad flexibility in setting eligibility criteria. A particular focus of the reforms was to encourage work.

What Is the Issue?

In the wake of declining cash assistance to families with children, did families rely more heavily on food assistance programs? This study investigated participation in, and benefits received from, AFDC/TANF and food assistance before and after PRWORA for children in low-income households (income below 300 percent of the Federal poverty line). The food assistance programs examined include the Food Stamp Program (FSP), the National School Lunch Program, the School Breakfast Program, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The study also explores how program participation and benefit amounts differed depending on the pre-transfer income (that is, income before receiving benefits) of the child's household. This investigation provides a comprehensive view of program interaction and an understanding of how combined aid from food assistance and AFDC/TANF cash assistance has changed over time for low-income children.

What Did the Study Find?

Declining participation in the Food Stamp Program among children in poor households. Between 1990 and 2004, participation in the Food Stamp Program among children in the poorest households (pre-transfer income below 50 percent of the Federal poverty line) fell from 74 percent to 61 percent. Participation was even lower in 2001, at 54 percent. In contrast, participation among children in households with higher income increased.

Increasing participation in school meals and WIC. Participation in the school meals program and WIC increased more than 20 percentage points between 1990 and 2004 for children in low-income households with pre-transfer income of 100-185 percent of the Federal poverty line. Among all children in low-income households, participation in the school meals program increased from 28 to 43 percent and participation in WIC increased from 7 to 15 percent.

Increasing participation among children in households receiving at least one assistance program. Although there was declining participation in AFDC/TANF, rising participation in food assistance programs resulted in an increase in the share of children in households that received either AFDC/TANF or any food assistance program from 35 percent to 52 percent between 1990 and 2004.

Declining average household resources for children in the poorest households. Children in the poorest households—with pre-transfer income below 50 percent of the poverty line—saw total household resources fall between 1990 and 2004. For this group, while participation and benefits from school meals, WIC, and nonfood assistance programs increased, participation in and benefits from both AFDC/TANF and FSP declined so that overall total combined inflation-adjusted benefits from AFDC/TANF and food assistance programs declined over \$250 per month. Increases in earnings and other income offset only a small portion of the decline in assistance benefits.

Increasing average household benefits for children in households with income above the Federal poverty line. In contrast to children in the poorest households, children in low-income households (income above the Federal poverty line) saw rising total household benefits from assistance programs. This rise was mainly due to increases in food assistance benefits, particularly from school meals and WIC. Overall, total household resources for children in households with pre-transfer income above the poverty line remained unchanged or increased slightly over the period.

Less moving in and out of food assistance programs. Turnover rates for food assistance programs declined. Turnover rates show the number of children in households that received benefits from a given program at any time during the year divided by the average number of such children in a month. The decrease suggests that these programs are used increasingly for longer term support. In contrast, the turnover rate for AFDC/TANF cash assistance increased. This increase, together with the drop in the number of low-income households with children receiving AFDC/TANF cash assistance, indicates that TANF is used more often for short periods.

Average monthly household benefits and income for children in the poorest households

Source benefits and income	1990	2001	2004
<i>In 2000 dollars</i>			
Total assistance	832	540	564
AFDC/TANF	369	111	97
Total food assistance	373	287	320
Other cash assistance programs	90	142	148
Earnings	133	170	150
Other income	67	95	111
Total resources	1,033	805	825

AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families.

How Was the Study Conducted?

ERS researchers used data from the 1990 and 2001 Survey of Income and Program Participation (SIPP) panels, which were collected during two periods of similar economic growth and unemployment, to describe changes in program participation before and after PRWORA. The analysis was supplemented using the most recent data available, the 2004 SIPP panel. The sample included all children observed for a full year who lived in households with income that ever fell below 300 percent of the Federal poverty line during the observation year. Children were grouped into one of six groups based on their household's pre-transfer income relative to the Federal poverty line for their household.

Introduction

The poverty rate for U.S. children is persistently and significantly higher than the poverty rate for working-age and elderly adults. In 2008, the share of children in poverty was 19 percent compared with 12 percent for working-age adults and 10 percent for the elderly (U.S. Census Bureau, 2009b). The United States targets many federally funded assistance programs toward children who live in poverty or near poverty—providing food assistance, cash assistance, tax credits, health insurance, child care, and housing. When the value of these in-kind benefits and taxes are considered in measuring poverty, child poverty rates drop to around 14-15 percent (U.S. Census Bureau, 2009a). Even so, about one in seven children still lives in poverty, a rate that is considerably higher than the rate for working-age adults.

One of the first assistance programs was Aid to Families with Dependent Children (AFDC), a cash assistance program for low-income single mothers and their children. For many families with children who experienced periods of very low income, the cash grant of AFDC formed the base of the family budget, while the benefits from other programs filled in gaps for specific needs like food and health insurance.

The 1990s saw sweeping changes to the safety net. Primary among them was the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which replaced AFDC with Temporary Assistance for Needy Families (TANF). Under TANF, States had to follow Federal restrictions that, for the first time, included lifetime limits on benefits, work requirements, and sanctions for failure to comply with requirements (see Moffitt, 2008, for more detail on welfare reform). The number of TANF beneficiaries declined from 14.2 million in 1994 to 4.1 million in 2007 (U.S. Department of Health and Human Services, 2009).¹

The main food assistance programs, which are also important sources of assistance for families with children, did not experience such sweeping changes in policy. These programs include the Food Stamp Program (FSP),² the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the National School Lunch and School Breakfast Programs (referred to in this report as the “school meals programs,” treating them as one program). The FSP was the only food assistance program directly modified by the PRWORA—primarily by the provision that made legal immigrants ineligible for the program. Food assistance programs have, however, changed in their own ways and have been affected by other factors, such as the economy and population change. Trends in the number of food assistance program beneficiaries are quite different from those of AFDC/TANF. The school meals and WIC programs have seen steadily increasing caseloads, while the FSP caseload has gone through swings that at least partially reflect changes in macroeconomic conditions.

Little research has been done on the patterns of multiple program participation or on how these patterns have changed during the post-welfare-reform era. The few exceptions include Long (1990), Winicki (2001), and Cole and Lee (2004). Long analyzed joint participation in AFDC and the FSP during the 1980s; Winicki examined multiple program participation among poor families immediately following welfare reform; and Cole and Lee studied participation in the FSP and WIC, but the study was limited to three States at the start of the 2000s.

¹Throughout the remainder of this report, we refer to the cash benefit part of the TANF program but not to other benefits of the program, such as job search assistance or job training.

²In October 2008, the Food Stamp Program was renamed the Supplemental Nutrition Assistance Program (SNAP). We use the old program name in this report because we are referring to periods before the program was renamed and the relevant literature uses the term FSP.

In this study, we first investigate changes in the relative importance of AFDC/TANF and food assistance programs by examining changes in the program participation status of children's households and the amounts received from each program both before and after PRWORA.³ Second, we explore how changes in participation status and benefit amounts differed according to household pre-transfer income level (that is, income before receiving benefits) relative to the poverty line. As Blank (2008) has pointed out, PRWORA reforms, which had a primary focus of encouraging work, may have left a gap in the safety net for those unable to work. Third, we estimate changes in the turnover rates in each program.

³Other programs targeted to low-income households (such as the Earned Income Tax Credit (EITC), Medicaid, State Children's Health Insurance Program, and public housing assistance) are also important and have grown in importance since the 1990s. Several conceptual and data limitations, however, push this study toward focusing on AFDC/TANF and the food assistance programs. The health insurance programs are conceptually different from TANF and food assistance programs. Although the health insurance programs can be used for preventive measures and in times when health care is needed, they cannot be tapped as resources in periods of low income when there are no health problems. In contrast, AFDC/TANF and the food assistance programs operate more directly as safety nets. Public housing assistance is theoretically a safety net program in that it can be used in periods of low income. However, there are waiting lists to receive housing assistance, meaning that many who are eligible will never receive it. The EITC is now a much bigger part of the family of assistance programs for low-income working families. However, EITC reporting in the Survey of Income and Program Participation data is quite poor.

AFDC/TANF and Food Assistance Programs: Changes and Links

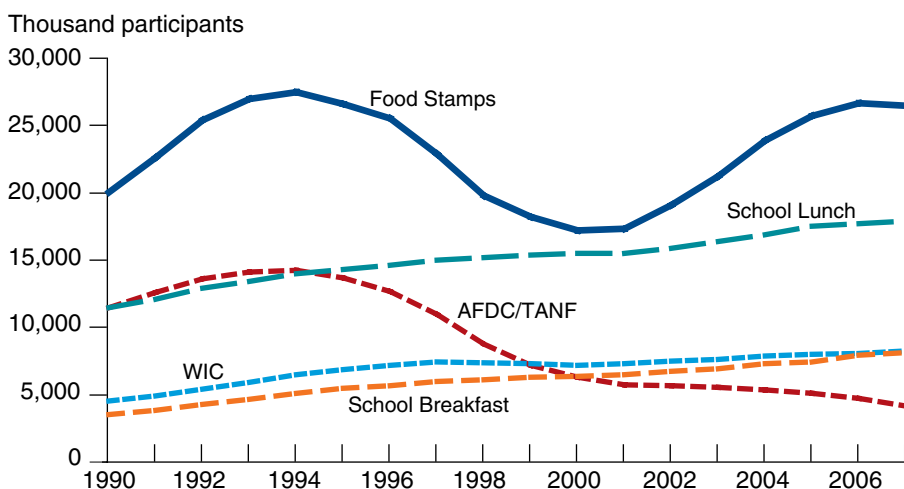
This section describes the economic and other factors that affect participation in the four programs and possible links between them.

AFDC/TANF Participation

The number of AFDC/TANF beneficiaries reached a record high of 14.2 million in 1994 but dropped drastically in the late 1990s (fig. 1). TANF caseload levels have remained low, even though the economy has cycled through periods of growth and recession. Prior to 2000, the size of the AFDC/TANF caseload tended to move countercyclically—in sync with the FSP caseload. But after 2000, the number of TANF beneficiaries did not increase as the economy slowed and unemployment rose, whereas food stamp participation did. Instead, the number of TANF beneficiaries continued to drop through 2007, reaching a low of 4.1 million beneficiaries.

An important study from the pre-reform era examined patterns of participation in the AFDC program—specifically, AFDC spells of reciprocity, exit from the program, and reasons for exit among women who received AFDC for at least 1 year (Bane and Ellwood, 1983). A key finding of this study was that AFDC served both as a program for long-term income maintenance and as a program for those who were experiencing temporary economic hardship and were likely to participate in the program for only a short period.

Figure 1
Number of AFDC/TANF, FSP, School Lunch, School Breakfast, and WIC participants, 1990-2007



AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children. The number of participants in school lunch and school breakfast is only for free or reduced-price meals, and does not include the number of children who pay full price for the meals.

Source: ERS estimates based on food stamp, School Lunch and School Breakfast, and WIC caseload totals from Food and Nutrition Service, USDA administrative data. AFDC/TANF data are from U.S. Department of Health and Human Services administrative data. For each program, total individual participation (adults and children) is counted.

A goal of welfare reform was to encourage beneficiaries to improve their employment prospects. This initiative worked better than most analysts expected. Most studies of the effects of reform found that many single mothers entered the workforce and left welfare. Employment among low-skilled single mothers increased rapidly compared with employment growth for other groups (Moffitt, 2008). However, 30-40 percent of welfare leavers did not find employment but left welfare programs because they were sanctioned (i.e., removed due to noncompliance) and for other unknown reasons (Moffitt, 2008). Little is known about the well-being of these leavers or about needy families who decide not to apply for benefits. Several studies found that welfare reform had affected household incomes unevenly across income and earnings distributions (Bollinger et al., 2007; Bitler et al., 2006).

The steady decline in TANF caseload levels as economic conditions worsened during the early 2000s suggests that the program's ability to serve as a temporary and countercyclical program may be limited by other program policies.⁴ Since welfare reform, program entry has dropped off more rapidly than exit (Acs et al., 2003; Grogger et al., 2003; Mueser et al., 2000). There is also evidence that time limits have had an effect on the length of time families receive cash assistance (Grogger and Michalopoulos, 2003; Ribar et al., 2008).

FSP Participation

FSP was designed to be countercyclical, and participation has historically followed the business cycle, with increases in participation following increases in unemployment and vice versa. FSP eligibility and benefits were limited under PRWORA to help offset other expenses (Primus, 2001) and as a result of other changes in the late 1990s.⁵ Most of the changes were thought to contribute to reduced participation, although determining how much of an impact the changes in PRWORA policy had on FSP participation has been difficult given that the unemployment rate was also declining. However, research shows that shorter recertification periods for working households explain some of the reduction in participation before 2001 (Kabbani and Wilde, 2003; Klerman and Danielson, 2009).

In contrast, changes to FSP rules since 2000 have likely boosted participation. For example, as part of PRWORA, the States were required to use Electronic Benefit Transfer (EBT) to deliver food stamp benefits by the end of 2002.⁶ This transition to EBT was expected to increase participation by reducing stigma because a beneficiary's status is not as public as with the coupon "stamps." Categorical eligibility was also extended, and many States adopted longer certification periods and simplified reporting (Kabbani and Wilde, 2003).⁷ Ribar et al. (2008) find that longer recertification periods for working households increased the length of time in the program, while Klerman and Danielson (2009) find that simplified reporting increased participation for the component of the FSP caseload that did not receive cash assistance (TANF or Supplemental Security Income (SSI)). Also during this time, certain vehicles were excluded from the asset test to help encourage labor force participation and the standard income deduction was adjusted for household size and inflation. Beginning in 2003, eligibility was restored to many legal immigrants and participation increased as a result (Henderson et al., 2008). Finally, increases in FSP outreach funding from

⁴Data for fiscal year (FY) 2009 are not yet available. Data from the last 2 months of FY 2008 showed increases in the number of recipients—which may reflect the recent economic downturn (U.S. Department of Health and Human Services, 2009).

⁵PRWORA removed FSP eligibility for legal immigrants, children's earnings were counted when the children reached age 18, and married children or children with their own children were included in the household rather than counted as separate households. In addition, many States assigned short recertification periods to a larger share of their working-participant households in order to reduce their error rates (Klerman and Danielson, 2009).

⁶Although many States had implemented EBT prior to PRWORA (Maryland as early as 1993), the last State to implement it was California in June 2004.

⁷Categorical eligibility was extended beyond TANF cash assistance to include those receiving other services funded by either TANF or State Maintenance of Effort provisions. Maintenance of Effort provisions required States to maintain certain spending levels for their TANF assistance programs after welfare reform.

the U.S. Department of Agriculture (USDA) was thought to increase case-loads, although evidence as to whether the increases have done so is mixed (Kabbani and Wilde, 2003; Klerman and Danielson, 2009).

School Meals and WIC Participation

The number of beneficiaries in the other large food assistance programs, school meals and WIC, has almost monotonically increased since 1990 (fig. 1). USDA Food and Nutrition Service (FNS) data on student participation in the National School Lunch Program (NSLP) show a fairly steady rise in student participation from the early 1990s to the present.⁸ The figure does not distinguish between enrollment in free or reduced-price lunch, but administrative data show a dip in the percentage of enrolled students who received free meals in the late 1990s. This is not surprising given that the economic period was unusually good for low-income Americans. We do not, however, see a similar dip for reduced-price lunch recipients, whose participation level seems to have increased steadily, although more slowly over time.

The growth in school meals participation for this period has not been studied, but experts consider a number of policies and administrative practices as possible factors. Three policy changes that may have had an effect are the expansion of Provision II and III schools, direct certification, and expanded use of electronic payment technology. The Provision II and III legal frameworks allow schools to reduce reporting and administrative costs by providing universal-free meals if the schools already have a certain high percentage of students certified to receive free or reduced-price meals.⁹ The provision of universal-free meals is expected to increase participation among students who would not otherwise qualify for a free meal. Direct certification, which all schools are now required to use, involves school officials using State TANF or FSP records to directly certify TANF and FSP-receiving students for free school meals without requiring them to complete certification applications; it has been shown to increase participation marginally (Gleason et al., 2003). The expanded use of electronic payment technology has been shown to increase participation (Moore et al., 2009), perhaps because it reduces either the stigma or waiting times (or both).

Although WIC is still a much smaller program than the food stamp or school meals programs, between 1990 and 2007, the program nearly doubled to 8.2 million beneficiaries, a figure almost twice the level for the TANF program for the same year (fig. 1). This doubling occurred during a time when birth rates were generally lower than in 1990 (Hamilton et al., 2009), which may have reduced the number of infants and children eligible for WIC. We know less about the causes of the change in WIC participation than we do about FSP participation. However, a few major factors are suggested in the literature and by experts, although empirical research has not yet tested these hypotheses.

First, an expanded budget made it possible for WIC to cover a larger share of eligible children between the ages of 1 and 4. We see that the caseload among children in this age group has grown the most since 1990 (Oliveira and Frazao, 2009). WIC is not an entitlement program, so when resources for the program are scarce, States use a priority system to provide benefits for the most nutritionally vulnerable groups. Many observers argue that, when the program was fairly new, children ages 1-4, who are considered a lower

⁸See Ralston et al. (2008) for information on NSLP participation before the 1990s.

⁹Under Provisions II and III, schools may provide free lunches to all students for 4 years as long as the school pays the difference between the Federal subsidies and the cost of providing the lunch. Federal subsidies are determined by the percentage of paid, free, and reduced-price lunch shares consumed in a base year at the school. The difference between the provisions concerns the way the base year is chosen.

priority group than pregnant and breastfeeding women and infants, were less likely to be covered during funding shortages. Sometime during the late 1980s and into the mid-1990s, the priority system was apparently used less and more eligible children participated.

Another possibility for the change is that increases in immigration may be raising the number of individuals eligible for the program since WIC eligibility rules have been less restrictive for immigrants regardless of documentation status than those for TANF and the FSP.¹⁰ Since 1992, the share of Hispanic participants in WIC has increased from 23 percent to 41 percent, indicating that increases in immigration may be an important driver of the overall increase in participation (USDA, 2007). The rising share of Hispanic children in WIC is concurrent with the increasing size of the Hispanic population in the country (U.S. Census Bureau, 2008).

Finally, expanded Medicaid eligibility due to increased income eligibility limits may have opened up WIC to a larger share of the population. However, this policy change is not likely to have caused a large portion of the growth in the program over the period. Although participants in Medicaid, AFDC/TANF, and the FSP are adjunctively eligible for WIC—meaning that participants of these other programs are automatically eligible for the program and do not have to document income—they make up a very small portion of all WIC beneficiaries.¹¹

Links Between AFDC/TANF and Food Assistance Programs

Participation in a food assistance program or in AFDC/TANF can affect participation in the other programs in many ways. Links between programs are facilitated by categorical and adjunctive eligibility rules for some programs. For example, participants of AFDC/TANF and the FSP are adjunctively eligible for WIC and AFDC/TANF, and FSP participants can be directly certified for school lunch. Outreach efforts to inform program clients about other programs for which they are, or may be, eligible also often link these programs. Before welfare reform, the FSP and AFDC shared application and certification processes and receiving AFDC was highly correlated with receiving FSP benefits (Tschoepe and Hinderer, 2001). When TANF and FSP administration was separated under PRWORA, FSP participation declined along with that of TANF (Moffitt, 2008). The TANF caseload did not rise as it was expected to when economic conditions worsened in the early 2000s, but the FSP caseload did, which is an indication that the links between these two programs are not as strong as they used to be.

Multiple Program Participation

Although data abound on participation in these and other assistance programs, publicly available administrative data do not provide the means to study multiple program participation. Little research has been done on the patterns of multiple program participation or on how these patterns have changed during the post-welfare-reform era. Recent work, however, has focused on the related question of how total benefits received from multiple programs have changed since welfare reform. Scholz et al. (2008) carefully document changes in antipoverty program expenditures over the last 35 years and how the changes have affected poverty among different subpopulations.

¹⁰Neither the WIC nor school meals programs consider immigrant status in determining eligibility.

¹¹In 2006, only 2 percent of WIC beneficiaries who reported their income for eligibility determination had income above 185 percent of the Federal poverty line (USDA, 2007). But because those who are adjunctively eligible do not need to report their income, this figure is probably an underestimate of the percentage of the caseload with income above 185 percent of the Federal poverty line. Of all WIC beneficiaries, 10 percent do not report their income. Thus, the percentage of WIC beneficiaries who become eligible for WIC only through Medicaid is likely to be somewhere near or below 10 percent of the caseload.

They find that total transfers did less to reduce poverty in 2004 than they did in 1993 and that nonelderly families, with and without children, with very low or no earnings received less assistance in 2004 than they had in 1993. More recently, Sherman (2009) finds that public benefits were less effective at lifting children out of severe poverty in 2005 than they were in 1995. Bollinger et al. (2007) estimate the effects of welfare reform on the level and composition of incomes of single mothers with dependent children and examine differences across these women by skill levels. They find that income gains among low-skilled single mothers came mainly from higher earnings and that income losses from TANF and other programs were not completely offset by increases in Earned Income Tax Credit (EITC) benefits.

Long (1990) studied the factors associated with joint AFDC and FSP participation, as well as moves into and out of program combinations (single, joint, or no program). She found that changes that are expected to improve a household's economic situation were correlated with transitions from participation in multiple programs to participation in a single program or in no programs. She also found that changes that are expected to hurt a household's economic situation predicted movement toward multiple program use. Winicki (2001) used Current Population Survey data to examine changes in the prevalence of program bundling among poor households with children between 1995 and 1999. Specifically, he examined household bundling of TANF, FSP, WIC, and school lunches. The study's coverage is limited to households with income below the poverty line and the period immediately following welfare reform. We expand upon both of these analyses to provide insight into the nature of multiple program participation in the current program environment to inform policymakers about the role of food assistance in the safety net currently available to children.

Data and Methodology

Data

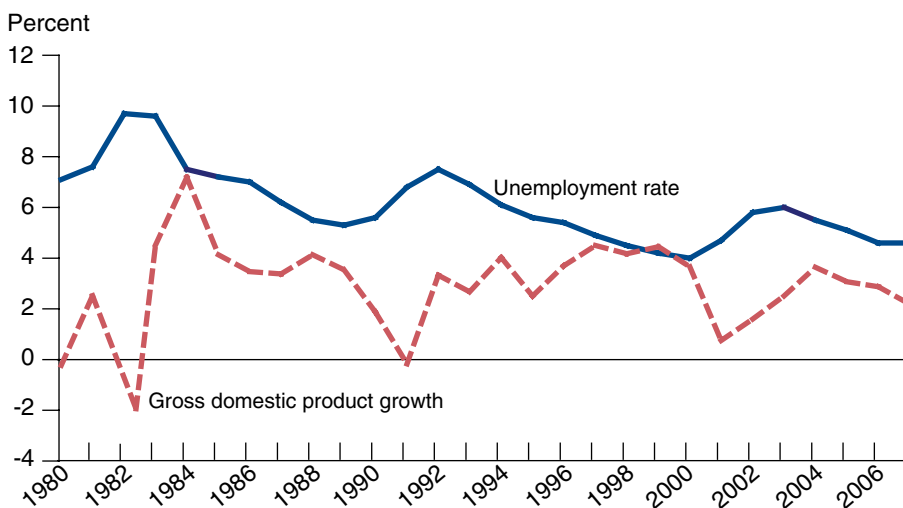
We use data from the 1990, 2001, and 2004 Survey of Income and Program Participation (SIPP) panels. The SIPP interviews individuals at 4-month intervals (waves). At each interview, individuals and households report their earnings from multiple sources, participation in assistance programs, and living conditions for each of the 4 previous months. The 1990 panel has a total of eight waves, covering 28 calendar months; the 2001 panel has nine waves, covering 32 calendar months; and the 2004 panel has 12 waves, covering 44 months.

We chose 1990 and 2001 as our main points of observation because both years mark the start of a period of higher unemployment rates and decreased gross domestic product (GDP) growth, followed by increased GDP growth and an eventual decrease in unemployment (fig. 2). This pre- and post-reform comparison does limit our ability to draw conclusions about program participation because participation is determined by many factors other than the policies of the programs themselves. As a result, our analysis is primarily descriptive. However, we believe that 1990 and 2001 are good comparisons because economic conditions, which are a primary determinant of program use, were similar. In 2004, GDP growth was rising and unemployment was falling, making this observation point very different from both 1990 and 2001 in terms of macroeconomic conditions. Changes in program participation and benefits observed between 2001 and 2004 may be due in part to the difference in macroeconomic environment.

Sample

Since we are particularly interested in children's welfare, our unit of analysis throughout is the child. We restrict the sample to children younger than 18 at the first interview who are present for the first full calendar year of the survey. In the interest of including only potential participants, we further restrict the

Figure 2
National unemployment and gross domestic product growth, 1980-2007



Source: ERS estimates based on annual average unemployment rate from the Bureau of Labor Statistics. GDP growth calculated from data reported by the Bureau of Economic Analysis.

sample to children in households with income that falls below 300 percent of the Federal poverty line in any month of the first year of the panel. Although this income cutoff is much higher than the eligibility cutoff for the FSP (130 percent of the poverty line) and reduced-price school meals or WIC (185 percent), we use it here for two main reasons. First, many households experience large variations in their monthly income (Newman, 2006). Second, the link between WIC and Medicaid eligibility (which has a higher income cutoff than 185 percent in some States) means that some children in households with income over the 185-percent threshold will be eligible for WIC.¹² For the rest of this report, we refer to this sample of children as a sample of children in “low-income” households for ease of presentation, even though the sample includes children in households with slightly higher incomes.

The final sample includes 11,856 children in the 1990 panel, 14,244 in the 2001 panel, and 17,809 in the 2004 panel. We apply individual calendar-year sampling weights to all estimates reported and use STATA 10.1 survey commands to adjust standard errors to account for the complex survey design of each panel.

Program Measures

Because our unit of analysis is the child and not the household, our measures of program participation merit some explanation. We consider a child to be participating in a program if the child or a member of the child’s household received benefits from the program. Because participation information is collected for each month that a child remains in the sample, we have monthly measures of participation for AFDC/TANF and the three food assistance programs.¹³

We also examine the total amount of monthly benefits received by the household in which the child lives. The amount of AFDC/TANF program benefits is the total of reported cash benefits received by people in the household of the child.¹⁴ Similarly, the amount of FSP and WIC benefits is the total of reported benefits received by the household. The amount of school meal benefits is computed from the reported type of meals received (free/reduced-price, breakfast and/or lunch) and the number of children reported to receive the meals. We use the maximum reimbursement rate¹⁵ for each type of meal for the first school year in each panel. For example, in the 2000-2001 school year, the maximum reimbursement rate for a free lunch was \$2.19. Assuming an average of 22 school days per month, we calculate a household with two children who received free school lunches in January 2001 to receive a benefit of \$96.36 per month. Total household benefits from AFDC/TANF and food assistance programs are calculated for each child. All benefit amounts are converted to 2000 dollars using the monthly Consumer Price Index.¹⁶

Some differences in the benefits issued by these programs should be noted when interpreting findings on average benefit levels from these programs. Both AFDC/TANF and FSP benefits vary by income of the household or family—that is, the amount of monthly benefits decreases as income of the household or family increases.¹⁷ The value of the WIC food package does not vary across income, but it does vary across eligibility category (e.g., pregnant and postpartum women, infants, and children). Our valuation for the school meals programs varies across the free and reduced-price classifications, but not within those categories.

¹²We do not attempt to estimate eligibility or participation rates.

¹³The FSP uses the household as the unit for receiving benefits, but the AFDC/TANF unit could be families or individuals, and both WIC and the school meals programs are targeted to individuals. Thus, our measure of household participation may not technically mean the child is a participant of the program, only that a child lives in the household of a program participant.

¹⁴It is unclear whether diversion payments or other lump sum payments provided through TANF, but not considered TANF cash assistance benefits, are captured with this measure or by the SIPP at all.

¹⁵FNS provides maximum reimbursement rates at <http://www.fns.usda.gov/cnd/Governance/notices/naps/NAPs00-01.pdf>.

¹⁶Each program adjusts benefits differently or not at all (in the case of TANF), so deflating benefit amounts by the Consumer Price Index may not accurately reflect the changes in the real value of each program’s benefits, but it is the only way to compare changes across all programs.

¹⁷AFDC/TANF determines benefits for the family unit, and one household can have multiple families. On the other hand, FSP determines benefits for the household.

Underreporting Error

Data on participation in assistance programs are imperfect because survey respondents are known to underreport their participation. Underreporting can lead to error in the calculation of participation rates and in the characterization of program participants (Marquis and Moore, 1990; Bollinger and David, 1997, 2001; Meyer et al., 2009; Taeuber et al., 2004; Lynch et al., 2008). Meyer et al. (2009) compared reporting error rates across 5 major national surveys and 10 transfer programs and found that SIPP had the lowest reporting error for many programs, including food assistance and TANF program participation and benefit receipt.¹⁸ They also found that reporting rates have declined over the years; however, again, the problem was not as pronounced in SIPP. In SIPP, the reporting rates for AFDC/TANF went from 79 percent of the estimated participation level in 1983 to 62 percent in 2004. For the FSP, the same rate changed from 81 percent in 1983 to 80 percent in 2004—which is not a big decline, especially compared with that found in other surveys (Meyer et al., 2009). This decline presents a caveat for our findings because we find declines in the number of participants over time for AFDC/TANF overall and for the FSP for some groups—the magnitude of the declines may be overestimated due to increases in underreporting. However, given that the declines in the number of participants have been documented by administrative data and that we find increases in the number of those receiving WIC and school meals, the issue of underreporting is not likely to alter our qualitative findings.

Another important question for our analysis is whether underreporting error is compounded by examining combined program participation. This compounding might be a particular problem if individuals who participate in several programs are also more likely to underreport. Because we have limited our sample to low-income children, we do not expect large differences in reporting by income level, which might be one way individuals who participate in several programs would underreport. So, we have not attempted to correct for underreporting error in this study. As Meyer et al. (2009) point out, correcting for underreporting for different subgroups is problematic and at best can only be done based on observable characteristics using such techniques as propensity score matching (Scholz et al., 2008). These corrections cannot account for unobservable factors that contribute to underreporting, which are likely to be important in determining the accuracy of respondent reports. We are mindful of the potential for bias, and we hope to investigate the particular issue of how multiple program participation estimation is affected by underreporting error in future research. Our results are consistent, however, with those of studies that have made corrections, such as Scholz et al. (2008).

¹⁸In SIPP, they found that approximately 80 percent of FSP benefit dollars were reported over the years examined, whereas in the other surveys (CPS, the Panel of Survey and Income Dynamics (PSID), the American Community Survey (ACS), and the Consumer Expenditure Survey (CE)), almost 60 percent of FSP benefits were reported. The reporting rate for TANF benefits in SIPP was also found to be better than in the CPS, PSID, or CE, but it was still much lower than one would want, at around 60 percent in recent years.

Changes in Program Participation and Beneficiary Characteristics

The sample characteristics, as reported for January of the first year of each panel, show several important changes across SIPP panels (table 1). First, the average age of the children increased slightly from 8.47 in 1990 to 8.83 in 2004. The share of White children decreased 14 percentage points to 52 percent between 1990 and 2004, whereas the share of Hispanic children increased 10 percentage points to 23 percent. The share of children living in households with heads of household who were employed decreased from 80 percent to 71 percent between 1990 and 2004, with half of the decrease occurring after 2001. The education level of household heads increased on average, with a smaller share of children living in households with heads who had only a high school diploma and a greater share in households with heads who had some college education. Children were more likely in 2004 than in 1990 to live in households with heads who were not married. Average monthly household income from earnings in the households in which the children lived increased by over \$200 between 1990 and 2001 but decreased below the 1990 level in 2004. This drop in average household earnings is surprising, given falling unemployment and rising GDP growth in 2004 compared with falling GDP growth and rising unemployment in 2001. Total income from all sources showed a similar pattern.

These changes in characteristics suggest that changes in program participation may be partly driven by changes in the racial/ethnic composition of the sample population (and their underlying propensity to participate in different programs) and in marital and employment status and overall education levels of the household heads. Otherwise, household size, structure, and composition appear to be rather stable over time, with about 2 adults and 2.5 children per child's household. In addition, the results do not show much variation in the number of working adults or in the age composition of children in children's households, except for the slight increase in average age of the sample noted above.

Program Participation and Average Monthly Benefit Amounts

Changes in the share of children in low-income households receiving AFDC/TANF and each of the three food assistance programs in January of the first year of each SIPP panel are consistent with the administrative data in figure 1 (table 2). The share of children in households receiving AFDC/TANF fell from 12 to 6 percent between 1990 and 2001. The share in households receiving FSP benefits between 1990 and 2004 fluctuated from 17 percent in 1990 to 14 percent in 2001 and to 19 percent in 2004. The share in households receiving school meals and WIC continually increased, up to 43 and 15 percent by 2004, respectively.

Changes in Beneficiary Characteristics

We compare the characteristics of children in low-income households that received benefits from each of the four programs between 1990 and 2004 (table 3). The sample for each program is restricted to children in low-income households that received benefits from AFDC/TANF, the FSP, the school meals programs, or WIC in January of each year. The samples are not mutually exclusive because the households could receive benefits from more than one program at any given time. We highlight the major changes in the

Table 1

Characteristics of children in households with income below 300 percent of the Federal poverty line, 1990, 2001 and 2004¹

Characteristics	1990		2001		2004	
	Mean	Standard error	Mean	Standard error	Mean	Standard error
Age (years)	8.47	0.06	8.84	0.04	8.83	0.04
Male (percent)	51.34	0.55	51.22	0.33	51.33	0.42
White (percent)	65.96	0.86	56.77	1.18	51.92	0.88
Black (percent)	16.76	0.72	17.70	0.13	17.83	0.15
Hispanic (percent)	13.21	0.60	20.44	0.34	23.35	0.55
Asian (percent)	3.42	3.54	1.54	0.35	2.57	0.23
Household size (number of people)	4.62	0.01	4.65	0.01	4.63	0.00
Adults (number)	2.02	0.01	2.04	0.02	2.01	0.00
Working adults (number)	1.39	0.01	1.46	0.01	1.37	0.02
Children younger than 2 (number)	0.29	0.01	0.25	0.01	0.25	0.00
Children ages 2-4 (number)	0.44	0.02	0.40	0.01	0.42	0.01
Children ages 5-12 (number)	1.18	0.01	1.21	0.01	1.19	0.01
Children ages 13-17 (number)	0.60	0.01	0.66	0.02	0.68	0.00
Head employed (percent)	80.17	3,976.06	76.45	0.50	70.82	0.63
Household total monthly income (dollars) ²	3,357.26	40.88	3,511.51	19.01	3,285.68	23.81
Household monthly earned income (dollars) ²	2,963.64	2.38	3,181.87	18.33	2,930.25	30.34
Monthly income-to-poverty ratio	213.85	1.85	222.50	0.08	207.00	1.45
Annual average income-to-poverty ratio	211.33	0.01	223.18	1.92	211.54	0.82
Household structure is nuclear (percent)	81.90	0.45	79.85	0.31	80.04	0.68
Household structure is vertical (percent)	6.59	0.57	6.41	0.30	7.58	0.33
Household structure is complex (percent)	11.45	0.85	13.72	0.62	12.37	0.36
Head has less than high school (percent)	25.33	0.85	21.81	0.77	21.06	0.21
Head has high school degree (percent)	36.81	0.69	31.40	0.55	25.19	0.33
Head has some college (percent)	21.52	0.44	22.76	0.48	30.50	0.35
Head completed college (percent)	7.21	0.45	19.32	0.08	19.37	0.48
Head completed post-graduate (percent)	7.87	0.65	4.72	0.18	3.88	0.01
Head married (percent)	73.25	0.45	67.23	0.06	64.42	0.60
Children (number)	11,856	NA	14,244	NA	17,809	NA

Nuclear household structure = Household includes only parents (single or not) and children. Vertical household structure = Household includes a third generation (either grandparents or grandchildren). Complex household structure = Household includes extended family members or nonfamily members. NA = Not applicable.

¹Children are included if they are younger than 18 at the first wave, are observed to live in a household with income below 300 percent of the Federal poverty line during 1 month in the first year of the panel, and are observed during the entire first calendar year. Weighted means reported; first calendar year weights applied; standard errors adjusted for complex survey design.

²Income reported in 2000 dollars.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001 and 2004 panels (month of January).

composition of children in households benefiting from each program, as well as how the changes compare across programs.

The average age of children in households receiving AFDC/TANF benefits increased more than 1 year, from 7.37 to 8.45. This increase in age is nearly three times larger than the increase observed in the full sample of children in table 1. The proportion of Hispanic children increased from 19 to 28 percent, a change of magnitude similar to the full sample, whereas the share in all other ethnic/race groups declined. Average household composition also shifted. The average number of working adults in each household increased (although it still remains below one), perhaps reflecting the increased emphasis/requirement of work for TANF participants. The number of school-aged children (in particular, children older than 12) in each household also increased, while the number of children younger than 5 decreased.

AFDC/TANF households reported receiving more earned and total monthly income in 2001 than they did in 1990 and, correspondingly, had a higher income-to-poverty ratio in January and over the year. This increase in earnings among AFDC/TANF households is fairly substantial—about \$200 per month, or \$2,400 per year. The 2004 figure is higher, at almost \$250 greater per month than in 1990. Consistent with the averages reported in table 1, AFDC/TANF household heads had higher average education levels in 2001 than in 1990. The same trends in income (through 2001) and education levels of household heads are observed for all four programs.

Children in households benefiting from the FSP in January exhibited many of the same trends as children in AFDC/TANF households. The average age increased, although not as dramatically, from 7.70 to 8.22, and the share of Hispanic children increased. The number of working adults in households also increased, while the number of children younger than 5 decreased. Total household income from earnings also increased for children in households receiving FSP benefits in both 2001 and 2004 compared with that of 1990.

Table 2

Household participation in AFDC/TANF and food assistance programs for children (younger than 18) in households with income below 300 percent of the Federal poverty line, 1990, 2001 and 2004

Program from which children's households receive benefits	1990		2001		2004	
	Mean	Standard error	Mean	Standard error	Mean	Standard error
<i>Percent</i>						
AFDC/TANF	11.64	0.65	5.64	0.19	5.88	0.48
FSP	17.00	0.74	13.61	0.26	19.13	0.15
School meals	28.16	0.87	36.89	0.17	42.94	0.88
WIC	6.93	0.47	13.01	0.47	15.44	0.46
<i>Number</i>						
Children	11,856	NA	14,244	NA	17,809	NA

AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families. NA = Not applicable.

Note: Weighted means reported; first calendar year weights applied; standard errors adjusted for complex survey design.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001, and 2004 panels (month of January)

Table 3

Characteristics of children in households with income below 300 percent of the Federal poverty line, by household program participation status, 1990, 2001, and 2004

	AFDC/TANF			FSP			School meals			WIC		
	1990	2001	2004	1990	2001	2004	1990	2001	2004	1990	2001	2004
Age (years)	7.37	8.45	8.58	7.70	8.22	8.14	9.07	9.35	9.48	5.22	5.52	5.45
Male (percent)	47.96	49.44	49.80	49.58	52.64	50.95	50.81	52.01	51.96	49.17	50.76	49.96
White (percent)	30.98	28.18	27.47	35.10	30.27	30.93	38.23	33.97	33.54	43.57	34.16	30.67
Black (percent)	43.37	37.45	34.65	39.48	36.99	34.74	33.19	27.10	26.76	32.46	22.93	21.41
Hispanic (percent)	18.75	28.47	30.14	19.98	26.80	26.77	23.43	33.86	33.15	20.70	37.55	41.44
Asian (percent)	5.75	1.74	2.62	4.43	3.37	1.48	4.29	2.55	1.87	1.25	3.13	1.88
Household size (number of people)	5.11	5.21	4.97	5.09	4.99	4.91	5.23	5.11	4.93	5.44	5.39	5.29
Adults (number)	1.78	1.87	1.83	1.82	1.86	1.80	1.93	2.00	1.93	2.02	2.21	2.16
Working adults (number)	0.44	0.74	0.67	0.59	0.87	0.83	1.03	1.27	1.19	0.95	1.30	1.30
Children younger than 2 (number)	0.54	0.41	0.35	0.47	0.33	0.34	0.28	0.23	0.20	0.92	0.76	0.76
Children ages 2-4 (number)	0.65	0.54	0.54	0.61	0.54	0.58	0.47	0.39	0.39	0.91	0.79	0.77
Children ages 5-12 (number)	1.45	1.56	1.29	1.44	1.48	1.41	1.70	1.63	1.53	1.02	1.12	1.09
Children ages 13-17 (number)	0.60	0.75	0.87	0.66	0.69	0.68	0.77	0.78	0.78	0.48	0.41	0.41
Head employed (percent)	23.34	39.52	38.11	35.58	48.38	50.20	62.14	66.48	64.90	58.16	61.12	62.48
Household total monthly income (dollars) ¹	1,388.15	1,465.84	1,582.32	1,358.07	1,514.82	1,486.09	1,999.67	2,353.14	2,313.13	1,797.74	2,359.18	2,310.78
Household monthly earned income (dollars) ¹	578.15	773.99	826.17	725.05	1,055.94	1,027.16	1,529.48	1,977.62	1,911.95	1,354.53	2,026.27	1,975.33
Monthly Income-to-poverty ratio	78.26	82.40	88.87	76.61	87.14	86.69	114.49	136.67	137.03	99.44	131.78	128.97
Annual average Income-to-poverty ratio	83.27	90.14	100.71	83.05	94.79	95.64	118.64	143.35	145.49	103.69	137.18	136.71
Household structure is nuclear (percent)	60.41	60.34	60.60	66.51	66.20	69.18	73.63	72.37	75.15	65.88	64.76	67.07
Household structure is vertical (percent)	20.91	13.52	20.78	15.59	10.88	13.92	11.32	8.60	9.71	18.42	12.36	12.94
Household structure is complex (percent)	18.69	26.14	18.62	17.89	22.92	16.90	15.01	19.01	15.14	15.70	22.89	19.97
Head has less than high school (percent)	51.19	50.10	38.77	51.00	47.22	36.46	44.41	37.74	31.92	48.60	40.01	36.88
Head has high school degree (percent)	34.18	30.62	28.64	33.05	29.93	28.88	35.40	32.18	26.91	36.94	32.39	26.84
Head has some college (percent)	13.73	16.55	23.96	14.11	17.70	27.96	14.45	19.66	30.27	12.50	16.41	25.47
Head completed college (percent)	0.41	2.38	6.32	0.37	4.90	5.91	2.73	9.01	9.69	0.90	10.22	9.34
Head has post-graduate (percent)	0.27	0.35	2.30	1.17	0.25	0.80	2.47	1.41	1.21	0.83	0.97	1.47
Head married (percent)	26.77	33.55	28.71	37.93	35.25	33.29	55.24	53.11	51.65	61.69	59.54	60.23
Children (number)	1,581	846	1,064	2,215	2,069	3,731	3,544	5,398	7,917	876	1,933	2,865

AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; FSP = Food Stamp Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children. Nuclear household structure = Household includes only parents (single or not) and children. Vertical household structure = Household includes a third generation (either grandparents or grandchildren). Complex household structure = Household includes extended family members or nonfamily members.

Note: Weighted means reported; first calendar year weights applied.

¹Income reported in 2000 dollars.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001, and 2004 panels (month of January).

The average age of children in households receiving school meals or WIC increased between 1990 and 2004, consistent with that observed in the full sample. The share of Hispanic children in households receiving WIC or school meals increased, most notably for WIC. There were fewer young children in households that received WIC benefits in 2001 and 2004 than in 1990. Unlike for the other three programs, changes in household structure were apparent among children in WIC households. The share of children in WIC-participating vertically structured households (those with a grandparent or grandchild present) fell, but the share living in even more complex households (those with extended kin or unrelated family members) rose.

Multiple Program Participation and Average Monthly Benefit Amounts

We examine the extent of joint program participation among children and how total household benefits from each program changed over time. Each panel in table 4 summarizes joint participation for children in households receiving one of the four programs examined. The top section of each panel reports the share of children in households that participated in each of the other programs. For example, panel A shows the share of children in households participating in AFDC/TANF that also participated in the FSP, the school meals programs, and WIC. Panel B shows the share of children in households participating in the FSP that also participated in AFDC/TANF, school meals, and WIC.

The bottom section of each panel of table 4 shows average monthly household benefits received from each program and the total from all four programs. For a given program, the average household monthly benefit for all households that participated is shown by matching the row for that program's benefits to the corresponding column of participants in that program. For example, the average benefit received by children in AFDC/TANF households, excluding any households that did not participate in AFDC/TANF (and therefore any zero amounts), is shown in the AFDC/TANF row. The benefits from other programs (in the other rows) include zero amounts if the child's household did not receive that particular program as well. For example, the average food stamp benefits received by all AFDC/TANF participants include the zero amounts received by children in households that did not receive FSP benefits. This accounting method allows us to sum the average monthly household benefits from all four programs.

Panel A shows participation and mean household benefit levels for children in households receiving AFDC/TANF. Most of these households also received benefits from at least one other program. The share of children in households that received both AFDC/TANF and FSP benefits declined from 89 percent in 1990 to 83 percent in 2001. In contrast, the share of children in households that received both AFDC/TANF and school meals rose from 69 to 80 percent, and the share in households that received both AFDC/TANF and WIC rose from 24 to 37 percent. The decline in the share of children in households receiving both AFDC/TANF and FSP benefits is surprising given that the households are still categorically eligible for the FSP.

The bottom section of panel A shows that the average monthly household benefits from AFDC/TANF for children in households that received AFDC/TANF dropped almost 40 percent from \$586 in 1990 to \$349 in 2001 and remained low (\$365) in 2004. Not only were there fewer children in households that received

Table 4

Cross-program household participation and mean household benefits for children in households with income below 300 percent of the Federal poverty line, 1990, 2001, and 2004

<i>Panel A: AFDC recipients</i>				<i>Panel B: FSP recipients</i>			
Cross-program participation and benefits	AFDC/TANF			Cross-program participation and benefits	FSP		
	1990	2001	2004		1990	2001	2004
Share of children in households that receive benefits from:	<i>Percent</i>			Share of children in households that receive benefits from:	<i>Percent</i>		
AFDC/TANF	100	100	100	AFDC/TANF	61	34	27
FSP	89	83	87	FSP	100	100	100
School meals	69	80	77	School meals	73	79	77
WIC	24	37	35	WIC	24	34	34
Mean monthly household benefits from:	<i>In 2000 dollars</i>			Mean monthly household benefits from:	<i>In 2000 dollars</i>		
AFDC/TANF	<i>586</i>	<i>349</i>	<i>365</i>	AFDC/TANF	360	123	96
FSP	292	224	250	FSP	<i>319</i>	<i>258</i>	<i>285</i>
School meals	106	146	120	School meals	114	136	122
WIC	19	20	20	WIC	19	18	19
All four programs	1,002	739	755	All four programs	840	535	522
	<i>Number</i>				<i>Number</i>		
Children	1,581	846	1,064	Children	2,215	2,069	3,731
<i>Panel C: School meals recipients</i>				<i>Panel D: WIC recipients</i>			
Cross-program participation and benefits	School meals			Cross-program participation and benefits	WIC		
	1990	2001	2004		1990	2001	2004
Share of children in households that receive benefits from:	<i>Percent</i>			Share of children in households that receive benefits from:	<i>Percent</i>		
AFDC/TANF	29	12	11	AFDC/TANF	41	16	13
FSP	44	29	34	FSP	60	36	43
School meals	100	100	100	School meals	52	56	56
WIC	13	20	20	WIC	100	100	100
Mean monthly household benefits from:	<i>In 2000 dollars</i>			Mean monthly household benefits from:	<i>In 2000 dollars</i>		
AFDC/TANF	169	43	40	AFDC/TANF	237	64	48
FSP	151	79	104	FSP	213	101	125
School meals	<i>136</i>	<i>147</i>	<i>134</i>	School meals	73	82	74
WIC	10	10	11	WIC	74	52	55
All four programs	482	278	288	All four programs	606	298	302
	<i>Number</i>				<i>Number</i>		
Children	3,544	5,398	7,917	Children	876	1,933	2,865

AFDC = Aid to Families with Dependent Children; TANF = Temporary Assistance for Needy Families; FSP = Food Stamp Program. WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Notes: Amounts in italics are the means among participants only. All other mean benefit amounts include zero values for children whose household does not participate in the other program. Weighted means reported; first calendar year weights applied.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001, and 2004 panels.

AFDC/TANF benefits in 2004, but the average amount that the households received was also lower than it was in 1990. Given the increase in earnings among AFDC/TANF households and the fact that TANF operates as a block grant with no inflation adjustments, this decrease in average monthly benefits is not surprising. For children in AFDC/TANF households, the average monthly household benefit from the FSP dropped from \$292 in 1990 to \$224 in 2001, the benefit from school meals rose from \$106 to \$146 in 2001 and then fell to \$120 in 2004, and the benefit from WIC barely changed. Overall, total program benefits among children in households that received AFDC/TANF decreased from \$1,002 per month in 1990 to \$739 and \$755 per month in 2001 and 2004, respectively.

The decline in receiving both FSP and AFDC/TANF benefits is also observed among children in households that participated in the FSP program (table 4, panel B). In contrast, joint receipt of FSP and WIC benefits increased. The average monthly household FSP benefit decreased from \$319 to \$258 between 1990 and 2001, although it increased to \$285 by 2004. In 2001, the average monthly household AFDC/TANF benefit received by FSP beneficiaries dropped from \$360 in 1990 to a third of that in 2001 and dropped even further in 2004. WIC benefits for children in FSP households did not change greatly over the period, despite the 10-percentage-point increase in joint participation. Between 1990 and 2001, the increase in monthly household school meals benefits among children in FSP households was greater in percentage terms than the increase in joint participation, rising nearly 20 percent from \$114 to \$136 but dropping to \$122 in 2004, which coincided with a small decline in joint participation. The drop from \$840 to \$535 in total monthly household program benefits for children in FSP households between 1990 and 2001 was even larger than the drop in benefits for children in AFDC/TANF households. Total monthly FSP benefits dropped even further to \$522 by 2004.

Examining joint program participation provides insight into how school meals (table 4, panel C) and WIC (table 4, panel D) have expanded since 1990. Whereas children in households receiving AFDC/TANF and FSP benefits were more likely to benefit from school meals or WIC in 2001 and 2004 compared with those in 1990, the opposite is not true. For children in school meals or WIC households, the share that also received AFDC/TANF declined by more than 50 percent between 1990 and 2001 and the share that also received FSP declined by 30 percent. By 2004, the overall drop from 1990 in the share of children in school meals or WIC households that also received FSP benefits was more than 20 percent. This decline suggests that the increase in the share of children in households receiving school meals and WIC may have been due partly to a rise in participation among households with income in the higher range of eligibility, which would exclude them from both the FSP and TANF. To understand these dynamics better, we later examine changes over time in the different types of transfers received by children in households of different poverty levels.

The share of children in school meals households that also received WIC jumped from 13 percent in 1990 to 20 percent in 2001 and remained at 20 percent in 2004. The converse (WIC participants receiving school meals) rose only slightly from 52 to 56 percent between 1990 and 2001 and remained at 56 percent in 2004. These differences in changes in joint participation may simply be due to differences in household structure and the specific age groups targeted

by each program. Regardless, the increase in joint participation suggests that households are tapping into more programs during the post-PRWORA era.

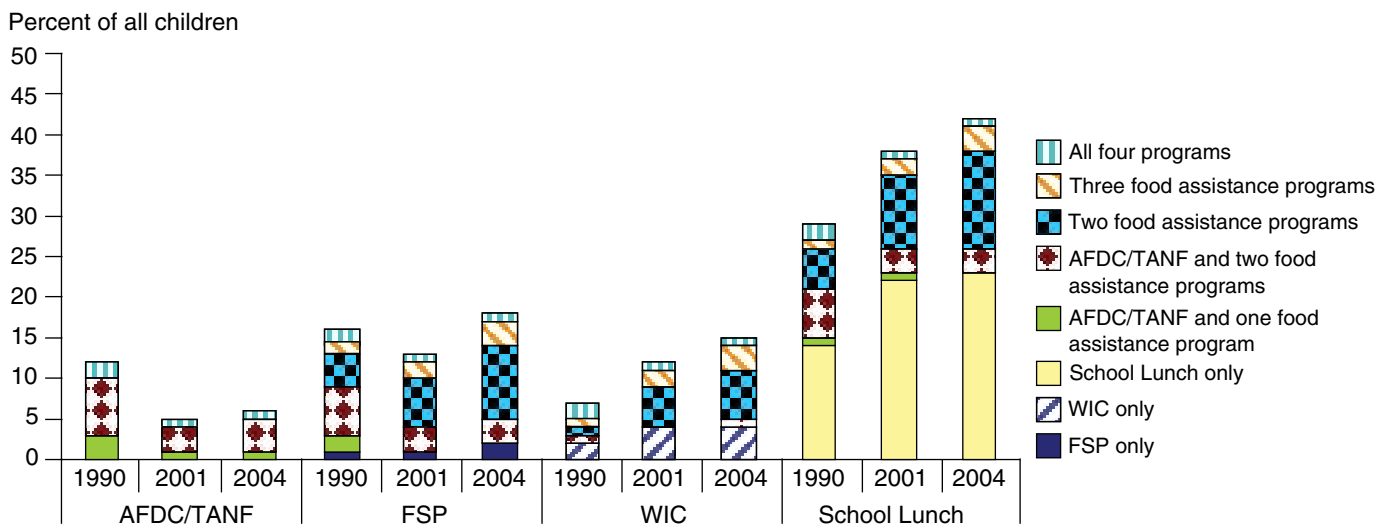
For children in households receiving school meals and WIC, the mean monthly household benefit from AFDC/TANF dropped markedly between 1990 and 2004. The benefit from FSP for this group also fell over the period—by more than 50 percent between 1990 and 2001—but rebounded somewhat in 2004. For children in households receiving school meals, the average monthly WIC benefit barely changed during the period. For children in households receiving WIC benefits, the average monthly school meals benefit rose between 1990 and 2001 but fell in 2004.

The large declines in total monthly household benefits for children in all four programs stem from the relative decline in AFDC/TANF participation and the fluctuation in household FSP participation, which may at least partially reflect changing economic conditions. The rise in household participation in WIC and school meals, both in combination with other programs and as a single program, has clearly contributed to lower monthly household benefits. Both programs offer lower benefits to households with higher incomes than do TANF and FSP. An analysis of participation and benefit levels by pre-transfer household income will shed further light on how and why total household program benefits have declined.

Changes in Program Bundling

Our tabulations up to now have examined the extent to which a child benefits from two programs concurrently. Next, we examine how the four programs are combined by looking at program bundles for children in households receiving each of the four programs in January 1990, 2001, and 2004. Figure 3

Figure 3
Participation of low-income children in multiple program bundles, 1990, 2001, and 2004



AFDC/TANF = Aid to Families with Dependent Children; SCH = school meals; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; FSP = Food Stamp Program.

Notes: Children are from households with income below 300 percent of the Federal poverty line. AFDC/TANF-only participation is below 1 percent and is excluded from this figure. Participation rates in all 16 program bundles for each year, including no programs, are presented in the appendix. Weighted means reported; first calendar year weights applied.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001, and 2004 panels (month of January).

summarizes program bundling; tabulations for each of 15 program bundles for each year are reported in the appendix table. Note that summing the bars over all programs will result in more than 100 percent because the segments representing joint participation in programs appear in each single program bar (for example, FSP and AFDC/TANF bundling are represented in both the FSP and the AFDC/TANF program bars).

Between 1990 and 2004, the share of children in households that received no program benefits fell from 65 percent to 48 percent (appendix table). In contrast, the share in households that received benefits from all four programs has been fairly constant at roughly 2-3 percent over the period.

Among children in AFDC/TANF households, the most common bundle was AFDC/TANF and two food assistance programs (mainly the FSP and school meals). Among children in the FSP in 1990, the most common bundle was also AFDC/TANF and two food assistance programs (one of which was Food Stamps). But in 2001 and 2004, the most common bundle among children in the FSP was two food assistance programs (mainly FSP and school meals). The share of children in households that received any combination of program benefits that included AFDC/TANF dropped (receiving AFDC/TANF benefits alone was below 1 percent in each year and is therefore left out of the figure to simplify presentation). The biggest declines between 1990 and 2001 were for AFDC/TANF bundled with one or two food assistance programs (mainly FSP and school meals). For children in FSP households, all bundles that included AFDC/TANF fell and all other bundles, especially all three food assistance programs, rose.

The patterns among children in WIC and school meals households are much different. The share of children in households that received only WIC benefits doubled between 1990 and 2001. In addition, the share of children in households that received benefits from WIC and one or two other food assistance programs rose significantly. The most notable change to bundles with school meals is an increase of over 50 percent in the share of children in households that received only school meals and the near doubling in the share of children in households that bundle with either one or both of the other food assistance programs. In 2004, these trends essentially continued, except that the share in households receiving only WIC benefits leveled off. The share of children in households that received benefits from all four programs declined only slightly.

Income From Transfers by Pre-Transfer Household Income

We examine changes in average monthly household benefits and participation in each of the programs by a household's level of pre-transfer income. We grouped children according to household income from earnings and other sources (excluding AFDC/TANF, SSI, and other means-tested cash transfers) relative to the poverty line for the household.¹⁹ The household income groups are as follows: less than 50 percent of the Federal poverty line (the poorest of the poor), 50-99 percent (poor), 100-129 percent (likely eligible for FSP), 130-184 percent (likely eligible for school meals and WIC), 185-249 percent (likely eligible for WIC through adjunctive eligibility for Medicare), and 250 percent or more of the Federal poverty line (low income, but not likely eligible for food assistance). Figure 4 and table 5 show the average benefit amount (in constant 2000 dollars) received per month for each child's household from different sources of means-tested public assistance for children in each of these groups for each SIPP survey year.

¹⁹In SIPP, total household income includes only amounts received from cash assistance programs. FSP, WIC, and school meals benefits are considered to be in-kind and are not counted. Therefore, we did not have to exclude these benefits to determine a household's pre-transfer income.

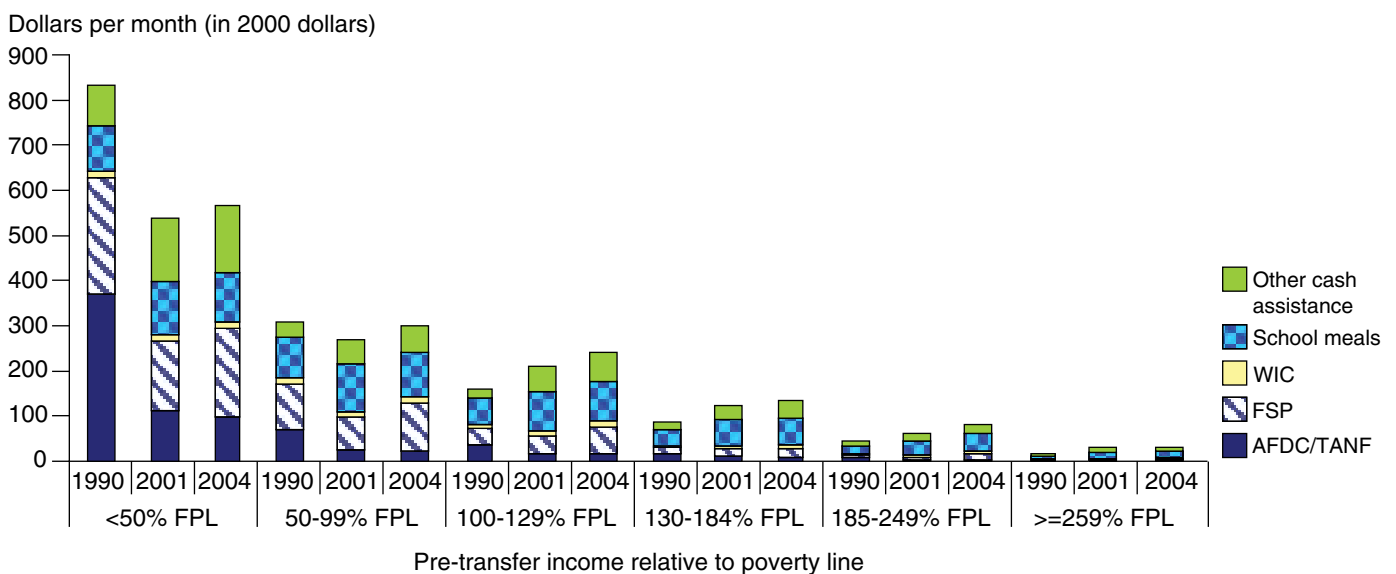
For the neediest (children in households with pre-transfer income below 50 percent of the Federal poverty level), average monthly household benefits decreased substantially between 1990 and 2001 and through 2004. The greatest fall was in AFDC/TANF benefits, which declined from \$369 in 2001 to \$97 in 2004. This group's average monthly FSP benefit also decreased, from \$259 in 1990 to \$155 in 2001, rebounding to \$197 in 2004. Benefits from school meals and WIC changed little, but benefits from other cash assistance programs (SSI and other welfare) increased sizably, from \$90 in 1990 to \$142 in 2001 and to \$148 in 2004.²⁰

Changes in average monthly household benefits for children in other income groups did not swing as greatly, and for those in households with incomes between 50 and 100 percent of the Federal poverty level, average monthly benefits were about the same. For those in households with incomes between 50 and 100 percent of the poverty line, a sizable increase in the average monthly household benefit from other cash assistance (mainly SSI) and a small increase in FSP benefits made up for decreases in AFDC/TANF benefits. However, total benefits for those in households with pre-transfer income above the poverty line generally increased between 1990 and 2004. Increases in average monthly household benefits from school meals, FSP, and other cash assistance programs account for higher total average benefits. Increases in household WIC benefits were also notable, but the levels were much smaller than the benefits from other programs.

The results from table 5 suggest that since PRWORA, children in households with very low earnings and other income may not benefit from safety net programs (most notably AFDC/TANF and FSP) to the same degree that they did in the early 1990s. Children in the poorest households (pre-transfer

²⁰SSI is a cash assistance program designed to help aged, blind, and disabled people with little or no income. The average benefit provided by the program is larger than benefits from other assistance programs. Although the program is not the main focus of this report, we include benefits from the program (and any other welfare income) in figure 4 and table 5 because children in households with very low or no earnings may themselves have received SSI or have a parent or other household member who is disabled and received the benefit.

Figure 4
Household income from assistance programs by household pre-transfer income for children in households with income below 300 percent of the Federal poverty line, 1990, 2001, and 2004



FPL = Federal poverty level; AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; FSP = Food Stamp Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Note: Weighted means reported; first calendar year weights applied.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001, and 2004 panels (month of January).

Table 5

Average monthly household income from various sources by pre-transfer income relative to the Federal poverty line for children in households with income below 300 percent of the Federal poverty line, 1990, 2001, and 2004

Pre-transfer income	SIPP panel (percent of children)	Assistance programs					Earnings and other income				
		AFDC/TANF	FSP	School meals	WIC	Other assistance programs ¹	Total	Earnings	income	Total	Total resources
		<i>In 2000 dollars</i>									
<50% FPL	1990 (14.3)	369	259	100	15	90	832	133	67	200	1,033
	2001 (11.3)	111	155	117	14	142	540	170	95	265	805
	2004 (14.6)	97	197	108	15	148	564	150	111	261	825
50-99% FPL	1990 (10.8)	71	99	92	14	32	308	1,080	271	1,351	1,659
	2001 (13.0)	24	74	106	12	53	269	1,041	219	1,260	1,528
	2004 (13.0)	23	107	99	13	57	299	981	300	1,281	1,581
100-129% FPL	1990 (7.3)	36	38	60	7	19	161	1,633	287	1,920	2,081
	2001 (8.9)	18	38	87	11	57	212	1,632	268	1,899	2,112
	2004 (9.2)	18	57	87	14	65	241	1,661	268	1,929	2,169
130-184% FPL	1990 (15.0)	18	13	35	3	17	86	2,265	299	2,564	2,650
	2001 (16.1)	10	18	57	7	32	125	2,296	248	2,544	2,668
	2004 (17.1)	8	20	58	9	40	135	2,283	257	2,540	2,675
185 - 249% FPL	1990 (18.4)	9	6	16	2	13	46	3,170	292	3,462	3,508
	2001 (17.6)	3	5	32	5	17	62	3,217	267	3,485	3,546
	2004 (17.3)	4	12	39	6	19	80	3,191	287	3,478	3,558
>=250% FPL	1990 (34.3)	3	2	5	1	7	18	5,211	413	5,624	5,642
	2001 (33.2)	1	3	14	2	12	31	5,866	361	6,227	6,258
	2004 (28.8)	2	4	15	2	8	32	5,851	386	6,237	6,268

SIPP = Survey of Income and Program Participation; AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; FSP = Food Stamp Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; FPL = Federal poverty level.

Note: Weighted means reported; first calendar year weights applied.

¹Other Assistance programs include Supplemental Security Income and other welfare.

Source: ERS estimates based on SIPP data from the 1990, 2001, and 2004 panels (month of January).

income below 50 percent of the Federal poverty line) have fewer resources in 2001 and 2004 than they did in 1990. Average monthly household benefits from AFDC/TANF and FSP declined over the period, while monthly household income from other cash assistance programs increased and monthly household benefits from WIC and school meals remained constant. Overall, total monthly household program benefits for this group decreased by 33 percent. Although monthly household earnings and other income increased slightly for the poorest group, the amount of increased earnings is only a fifth of the decline in total household program benefits. These findings are consistent with those who have cited income declines among households with nonworking, nonelderly adults (Blank, 2008; Scholz et al., 2008; Sherman, 2009). Although the share of children in households with income below 50 percent of poverty declined as a share of children in the sample in 2001, the share rebounded to its 1990 level (14 percent) in 2004.

For children in the other income groups, total monthly household resources were unchanged or up slightly. For the groups in households with income between 100 and 250 percent of poverty, total monthly household resources increased because monthly household benefits from means-tested programs were up. For the highest income group, monthly household earnings and benefits from means-tested programs both increased. One important caveat is that we have not included the value of the household EITC for any children. However, for the poorest group who experienced the greatest decline in total monthly household transfer benefits, the EITC would be quite small because they have very low household earnings.

For the poorest children whose households depend almost entirely on transfer income, total monthly household benefits from four assistance programs declined by 44 percent between 1990 and 2004. Their monthly household AFDC/TANF benefits fell by 74 percent, and their monthly household FSP benefits fell by 24 percent. Other monthly household cash assistance benefits for this group more than doubled, making up for some of the shortfall. Table 6 provides mean values for some selected household characteristics for children in each income group. We see that part of the decline in monthly household program benefits among children in the poorest households can be explained by lower levels of household receipt of AFDC/TANF and FSP. This reduction in receipt of these two programs is particularly surprising given that household pre-transfer income is so low and that the increase in receipt of other cash assistance is not nearly as large as the decline.

Turnover Rates by Program

A comparison of the turnover rates over time for each program can highlight the extent to which the flow of individuals on and off programs has changed. Following Long (1990), we define the turnover rate as the number of children in households that received benefits from a given program at any time during the year divided by the average number of such children in a month. The higher the rate, the greater the number of children whose household benefits from the program over the course of a year compared with an average month (table 7).

In 1990, AFDC had the lowest turnover rate (1.24), whereas WIC had the highest (1.50). In other words, AFDC participation was more stable over a year relative to WIC participation, which may not be surprising given the entitlement status of AFDC in 1990 and given WIC's categorical eligibility

Table 6

Characteristics of children's households by household pre-transfer income relative to the Federal poverty line for children in households with income below 300 percent of the Federal poverty line, 1990, 2001, and 2004

Pre-transfer Income	SIPP panel (percent of children)	Share of children living in a household where someone reports receiving benefits from these programs										Household size	Working adults in household	Age of household head	Household head employed	
		AFDC/TANF	FSP	School meals	WIC	SSI	Percent-----			Number-----						Years
<50% FPL	1990 (14.3)	60	74	65	20	12	4.65	0.35	34.93	24						
	2001 (11.3)	31	54	69	27	20	4.70	0.49	35.77	32						
	2004 (14.6)	25	61	69	27	19	4.66	0.51	36.90	34						
50-99% FPL	1990 (10.8)	14	35	60	18	6	5.30	1.12	37.05	72						
	2001 (13.0)	7	31	65	23	9	4.85	1.05	37.43	65						
	2004 (13.0)	7	39	67	24	9	4.88	1.01	37.83	62						
100-129% FPL	1990 (7.3)	8	13	47	9	5	4.85	1.28	37.24	84						
	2001 (8.9)	5	16	59	21	9	4.81	1.32	37.66	73						
	2004 (9.2)	6	22	62	23	8	4.87	1.28	37.53	68						
130-184% FPL	1990 (15.0)	3	5	32	4	3	4.67	1.46	37.06	88						
	2001 (16.1)	4	7	43	14	6	4.70	1.48	37.88	81						
	2004 (17.1)	2	10	49	18	6	4.67	1.45	37.69	77						
185 - 249% FPL	1990 (18.4)	2	3	13	3	3	4.60	1.60	37.43	92						
	2001 (17.6)	1	2	26	10	2	4.60	1.70	38.59	86						
	2004 (17.3)	1	5	34	12	3	4.59	1.64	38.82	82						
>=250% FPL	1990 (34.3)	1	1	5	1	1	4.32	1.78	38.74	96						
	2001 (33.2)	0	1	12	3	1	4.50	1.85	39.76	90						
	2004 (28.8)	1	2	15	4	1	4.42	1.78	39.53	84						

SIPP = Survey of Income and Program Participation; AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; FSP = Food Stamp Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; SSI = Supplemental Security Income; FPL = Federal poverty level.

Note: Weighted means reported; first calendar year weights applied.

Source: ERS estimates based on SIPP data from the 1990, 2001, and 2004 panels (month of January).

restrictions (pregnant women, women who are at most 1 year post-partum, and children younger than 5). However, in 2001 and 2004, the TANF turnover rate was the highest among all the programs (1.61 and 1.57, respectively), confirming results from other studies that have examined cycling on and off of TANF (Richburg-Hayes and Freedman, 2004). The decline in the share of children in households that benefit from AFDC/TANF (as observed in January of each year, table 1) masks the increase cycling into and out of the program over the course of a year. The turnover rate for FSP also increased from 1.29 in 1990 to 1.45 in 2001, but it dropped down to a rate similar to that of 1990 by 2004 (1.32). Turnover rates for both WIC and school meals dropped steadily from 1990 to 2004.

Table 7

Turnover rates for AFDC/TANF, FSP, WIC and school meals programs, 1990, 2001, and 2004¹

Program	1990	2001	2004
AFDC/TANF	1.24	1.61	1.57
Change from 1990 (percent)	NA	30.1	26.3
FSP	1.29	1.45	1.32
Change from 1990 (percent)	NA	12.0	1.9
School meals	1.33	1.28	1.25
Change from 1990 (percent)	NA	-4.4	-6.1
WIC	1.50	1.44	1.36
Change from 1990 (percent)	NA	-4.4	-9.5

AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; FSP = Food Stamp Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; NA = Not applicable.

Note: Weighted means reported; first calendar year weights applied.

¹The turnover rate is calculated as the number of children in households that benefit from a given program at least once during the year divided by the average number of children in households that receive the program in a month.

Source: ERS estimates based on household participation during the first calendar year of each survey among children in households with income below 300 percent of the Federal Poverty line in the Survey of Income and Program Participation 1990, 2001, and 2004 panels.

Discussion and Directions for Future Research

None of the four programs examined was designed to be the main safety net for the poor in the United States. However, the Food Stamp Program is commonly referred to as the “cornerstone” of the Nation’s food assistance programs as it is the largest of the 15 USDA domestic food assistance programs (USDA, 2008). Many analysts consider the FSP to be a major cornerstone of all domestic antipoverty programs (Zedlewski, 2000), and it is one of the only programs that is both an entitlement and available to almost all individuals.²¹

Other research has shown declines in food stamp participation in the early 2000s. Our research shows that participation is down even for children in the poorest families. Although we expected to find a large decline in participation in AFDC/TANF, we also expected to find that participation in the Food Stamp Program increased, or at least remained level, given that the FSP is still an entitlement program. However, we find an 18-percent decrease in food stamp participation between 1990 and 2004 for children in households with incomes that are less than half of the Federal poverty line (see table 6). This finding highlights a potential gap in the program’s reach to the neediest families. Instead, our findings show more children relying on school meals and WIC, either as single programs or in combination with each other. Administrative data show that food stamp participation levels have increased sharply with the recent recession, which started in 2008. When more recent survey data become available, we will be able to examine whether participation in the FSP has increased for children in the poorest households.

As a caveat, an increase in underreporting over time, as found by Meyer et al. (2009), could have exaggerated the observed decline in participation of AFDC/TANF and FSP. However, we feel that this factor is not likely to be strong given the large increase in participation observed for WIC and school meals.

Much of the increase in participation in WIC and school meals occurred among children in the higher end of the low-income distribution, suggesting that changes and recent outreach efforts have been successful at making it easier for children with working parents to access these programs. With the recent economic downturn, these outreach efforts are likely to be increasingly important to help meet the nutritional needs of low income children. However, the extent to which food assistance is filling in for declines in earned income is limited.

²¹Able-bodied workers with no dependents are excluded under some criteria that can vary with regional economic circumstances.

References

- Acs, G., K. Phillips, and S. Nelson. 2003. *The Road Not Taken? Changes in Welfare Entry During the 1990s*, Assessing the New Federalism Discussion Paper 03-03, Urban Institute, Washington, DC.
- Bane, M.J., and D. Ellwood. 1983. *The Dynamics of Dependence: The Routes to Self-Sufficiency*, Report for the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.
- Bitler, Marianne, Jonah Gelbach, and Hilary Hoynes. 2006. "What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments," *American Economic Review* 96(4):988–1012.
- Blank, Rebecca. 2008. "Memo to the President: Decrease Poverty and Increase Opportunity," Memos to the President, No. 3, The Brookings Institution, Washington, DC.
- Bollinger, Christopher, Luis Gonzalez, and James P. Ziliak. 2007. "Welfare Reform and the Level and Composition of Income," Mimeo, University of Kentucky.
- Bollinger, Christopher, and Martin David. 2001. "Estimation with Response Error and Nonresponse: Food Stamp Participation in the SIPP," *Journal of Business and Economic Statistics* 19(2):129-41, April.
- Bollinger, Christopher, and Martin David. 1997. "Modeling Discrete Choice with Response Error: Food Stamp Participation," *Journal of American Statistical Association* 92(439):827-35, September.
- Cole, Nancy, and Ellie Lee. 2004. *Feasibility and Accuracy of Record Linkage to Estimate Multiple Program Participation*, E-FAN-03-008-3, U.S. Department of Agriculture, Economic Research Service, November.
- Gleason, Phillip, Tania Tasse, Kenneth Jackson, and Patricia Nemeth. 2003. *Direct Certification in the National School Lunch Program—Impacts on the Program Access and Integrity: Final Report*, E-FAN-03-009, U.S. Department of Agriculture, Economic Research Service, October.
- Grogger, Jeffrey, and Charles Michalopoulos. 2003. "Welfare Dynamics under Time Limits," *Journal of Political Economy* 111(3):530-54, June.
- Grogger, J., S. Haider, and J. Klerman. 2003. "Why Did the Welfare Rolls Fall in the 1990s? The Importance of Entry," *American Economic Review* 93(2):288–92, May.
- Hamilton, B.E., J.A. Martin, and S.J. Ventura. 2009. "Births: Preliminary Data for 2007," *National Vital Statistics Reports* 57(12):1-23.
- Henderson, Everett J., Randy Capps, and Kenneth Finegold. 2008. *Impact of 2002-03 Farm Bill Restorations on Food Stamp Use by Legal Immigrants*, Contractor and Cooperator Report No. 40, U.S. Department of Agriculture, Economic Research Service, April.

Kabbani, Nader S., and Parke E. Wilde. 2003. "Short Recertification Periods in the U.S. Food Stamp Program," *The Journal of Human Resources* 38(Supplement 2003):1112-38, Special Issue on Income Volatility and Implications for Food Assistance Programs.

Klerman, J.A., and C. Danielson. 2009. *Determinants of the Food Stamp Program Caseload*, Contractor and Cooperator Report No. 50, U.S. Department of Agriculture, Economic Research Service, January.

Long, Sharon. 1990. *Children and Welfare: Patterns of Multiple Program Participation*, SIPP Working Paper Series, No. 9025, U.S. Census Bureau.

Lynch, Victoria, Dean M. Resnick, Jane Staveley, and Cynthia M. Tauber. 2008. *Differences in Estimates of Public Assistance Reciprocity Between Surveys and Administrative Records*, U.S. Census Bureau and the Jacob France Institute, January.

Marquis, K., and J. Moore. 1990. "Measurement Errors in the SIPP Program Reports," *Proceedings of the Bureau of the Census Annual Research Conference*, U.S. Census Bureau.

Moffitt, R. 2008. *Welfare Reform: The U.S. Experience*, Discussion Paper No. 1334-08, Institute for Research on Poverty, February.

Meyer, Bruce D., Wallace K.C. Mok, and James X. Sullivan. 2009. *The Under-Reporting of Transfers in Household Surveys: Its Nature and Consequences*, NBER Working Paper No. 15181, National Bureau of Economic Research.

Mueser, P., J. Hotchkiss, C. King, P. Rokicki, and D. Stevens. 2000. "The Welfare Caseload, Economic Growth and Welfare-to-Work Policies: An Analysis of Five Urban Areas," Mimeo, University of Baltimore, July.

Moore, Quinn, Lara Hulsey, and Michael Ponza. 2009. *Factors Associated with School Meal Participation and the Relationship Between Different Participation Measures*, Contractor and Cooperator Report No. 53, U.S. Department of Agriculture, Economic Research Service, June.

Newman, Constance. 2006. *The Income Volatility See-Saw: Implications for School Lunch*, Economic Research Report No. 23, U.S. Department of Agriculture, Economic Research Service, August.

Oliveira, Victor, and Elizabeth Frazao. 2009. *The WIC Program: Background, Trends, and Economic Issues*, 2009 Edition, Economic Research Report No. 73, U.S. Department of Agriculture, Economic Research Service, April.

Primus, Wendell. 2001. "Comment," in Rebecca Blank and Ron Haskins (editors), *The New World of Welfare*, pp.130-36, Washington, DC: Brookings Institution Press.

Ralston, Katherine, Constance Newman, Annette Clauson, Joanne Guthrie, and Jean Buzby. 2008. *The National School Lunch Program: Background, Issues, and Trends*, Economic Research Report No. 61, U.S. Department of Agriculture, August.

Ribar, David C., Marilyn Edelhoach, and Qiduan Liu. 2008. "Watching the Clocks: The Role of Food Stamp Recertification and TANF Time Limits in Caseload Dynamics," *Journal of Human Resources* 43(1):208–39.

Richburg-Hayes, L., and S. Freedman. 2004. *A Profile of Families Cycling On and Off Welfare*, U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

Scholz, John Karl, Robert Moffitt, and Benjamin Cowan. 2008. *Trends in Income Support*, Discussion Paper no. 1350-08, Institute for Research on Poverty, September.

Sherman, Arloc. 2009. *Safety Net Effective at Fighting Poverty But Has Weakened for the Very Poorest*, Center on Budget and Policy Priorities, Washington, DC, July 6.

Tauber, Cynthia, Dean M. Resnick, Susan P. Love, Jane Stavely, Parke Wilde, and Richard Larson. 2004. *Differences in Estimates of Food Stamp Program Participation Between Surveys and Administrative Records*, U.S. Census, Jacob France Institute, U.S. Department of Agriculture, and the Maryland Department of Human Resources, June.

Tschoepe, Gary J., and John J. Hinder. 2001. "Explaining State AFDC and Food Stamp Caseloads: Has Welfare Reform Discouraged Food Stamp Participation?" *The Social Science Journal* 38:435–43.

U.S. Census Bureau. 2009a. "Alternative Poverty Estimates Based on National Academy of Sciences Recommendations, by Selected Demographic Characteristics and by Region: 2006," Poverty Measurement Studies and Alternative Measures, Tables of Alternative Poverty Estimates: 2007, <http://www.census.gov/hhes/www/povmeas/tables.html>.

U.S. Census Bureau. 2009b. "Income, Poverty and Health Insurance Coverage in the United States: 2008," Press Release, September 10, 2009, http://www.census.gov/Press-Release/www/releases/archives/income_wealth/014227.html.

U.S. Census Bureau. 2008. "U.S. Hispanic Population Surpasses 45 Million, Now 15 Percent of Total," Press Release, May 1, 2008, <http://www.census.gov/Press-Release/www/releases/archives/population/011910.html>.

U.S. Department of Agriculture, Food and Nutrition Service. 2007. *WIC Participant and Program Characteristics 2006*, WIC-06-PC, by Susan Bartlett, Ellen Bobronnikov, Michele Mendelson, et al., Project Officer, Fred Lesnett, December 2007.

U.S. Department of Agriculture. 2008. *USDA Awards Food Stamp Program Outreach Grants*, Press Release No. 0004.08, December 5.

U.S. Department of Health and Human Services, Administration for Children and Families. 2009. "Combined TANF and SSP-MOE: Fiscal and Calendar Year 2007," Data & Reports, http://www.acf.hhs.gov/programs/ofa/data-reports/caseload/2007/2007_recipient_tanssp.htm.

U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation. 2008. TANF "Leavers", Applicants, and Caseload Studies, <http://aspe.hhs.gov/HSP/leavers99/> (accessed 7/11/08).

Winicki, Joshua. 2001. "Low-Income Families Participating in Fewer Assistance Programs," *FoodReview* 24(2):38-44, U.S. Department of Agriculture, Economic Research Service, October.

Zedlewski, Sheila R. 2000. *Recent Trends in the Food Stamp Program: Testimony before the House Committee on the Budget Task Force on Welfare*, The Urban Institute, Washington, DC.

Appendix

Share of children in households with income below 300 percent of the Federal poverty line participating in specific program bundles in January, 1990, 2001, and 2004

Program bundles	1990	2001	2004
	<i>Percent</i>		
No Programs	64.9	55.7	48.1
AFDC/TANF only	0.4	0.2	0.2
FSP only	1.0	1.1	1.6
WIC only	1.8	4.2	4.5
School meals only	14.4	21.6	23.3
AFDC/TANF and FSP	2.2	0.4	0.5
AFDC/TANF and WIC	0.2	0.2	0.0
AFDC/TANF and school meals	0.6	0.5	0.5
FSP and WIC	0.5	1.0	1.5
FSP and school meals	3.9	5.0	7.7
WIC and school meals	0.6	3.9	4.2
FSP, WIC, and school meals	1.1	1.9	3.1
AFDC/TANF, FSP, and WIC	0.8	0.4	0.7
AFDC/TANF, FSP, and school meals	5.7	2.5	2.7
AFDC/TANF, WIC, and school meals	0.1	0.1	0.1
All four	1.7	1.4	1.2
Total	100.0	100.0	100.0

AFDC/TANF = Aid to Families with Dependent Children/Temporary Assistance for Needy Families; FSP = Food Stamp Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Note: Weighted means reported; first calendar year weights applied.

Source: ERS estimates based on Survey of Income and Program Participation data from the 1990, 2001, and 2004 panels (month of January).