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AN ASSESSMENT OF THE EFFECTIVENESS OF ANTI-POVERTY PROGRAMS  
IN THE UNITED STATES

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An Assessment of the Effectiveness of Anti-Poverty Programs in the United States  
Yonatan Ben-Shalom, Robert A. Moffitt, and John Karl Scholz  
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**ABSTRACT**

We assess the effectiveness of means-tested and social insurance programs in the United States. We show that per capita expenditures on these programs as a whole have grown over time but expenditures on some programs have declined. The benefit system in the U.S. has a major impact on poverty rates, reducing the percent poor in 2004 from 29 percent to 13.5 percent, estimates which are robust to different measures of the poverty line. We find that, while there are significant behavioral side effects of many programs, their aggregate impact is very small and does not affect the magnitude of the aggregate poverty impact of the system. The system reduces poverty the most for the disabled and the elderly and least for several groups among the non-elderly and non-disabled. Over time, we find that expenditures have shifted toward the disabled and the elderly, and away from those with the lowest incomes and toward those with higher incomes, with the consequence that post-transfer rates of deep poverty for some groups have increased. We conclude that the U.S. benefit system is paternalistic and tilted toward the support of the employed and toward groups with special needs and perceived deservingness.

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Like other developed countries, U.S. society has directed its government to provide assistance to its neediest individuals. The U.S. now has an extensive array of government benefit programs that aim to help those in need. In this chapter, we review the U.S. benefit system and show its impact on the low income population, where it should be expected to have reduced poverty and near-poverty rates. We examine three broad questions, each with a set of subquestions. One question is whether the U.S. system of benefit programs is actually as extensive as commonly thought. Does it cover all those in need? Has assistance to those in need increased or decreased over time? Has assistance increased over time for some groups relative to others? A second question is whether the system of programs has achieved its direct goal, namely, whether the system has reduced rates of poverty and near-poverty, which we assess by comparing observed family incomes excluding government benefits to those incomes after including benefits. Does the system have similar effects on deep poverty and near-poverty? Have some programs been more important than others in poverty reduction? Are the poverty rates of some demographic groups lowered more than others? Do recent proposed improvements in the definition of the poverty line make a difference to the answer? A third question is whether the programs developed by the government have had unintended behavioral consequences that detract from whatever success in reducing poverty they may have had. Have the programs reduced work, saving, or human capital investment? If so, should the poverty-reducing impacts be recomputed to take into account the income-reducing side effects of the benefit system? Does this make a difference to our findings on the poverty impacts of the system?

Our review covers the two main types of assistance programs in the U.S.: means-tested programs and social insurance programs. Means-tested programs provide benefits to those with low income or assets and hence directly aim to help those in most need. Social insurance programs provide benefits to the population as a whole and are intended to insure individuals against the risk of unemployment, disability, and old age and inability to work. While not directly aimed at helping those in most need, the social insurance programs in the U.S. have a major impact on poverty because of their large scale. The leading means-tested programs are Temporary Assistance for Needy Families, the Supplemental Nutrition Assistance Program, Supplemental Security Income, Medicaid, the Earned Income Tax Credit, and programs for assistance with housing, job training, and child care. The leading social insurance programs are the Social Security retirement program, Social Security Disability Insurance program, Unemployment Insurance, Workers' Compensation, and Medicare.

The first section of our review describes these programs and their features in more detail. We discuss their current levels of expenditures and caseloads, as well as trends over time, for the programs individually and for the system as a whole. The second section reviews the impact of the programs, both individually and collectively, on overall poverty and poverty for different groups, and how those have changed over time. The third section presents what is known to date on the impact of these programs on work incentives, human capital incentives, and incentives for family formation, and how those incentives affect estimates of poverty impacts. The final section summarizes the results and discusses a few of their implications.

## **Section 1: The U.S. Benefit System**

We summarize the main features of each of the leading means-tested and social insurance programs in the U.S. More detailed summaries can be found in government documents and in scholarly publications (Krueger and Meyer, 2002; Moffitt, 2003a; U.S. Social Security Administration, 2010).

### **Means-Tested Programs**

The Temporary Assistance for Needy Families (TANF) program provides cash benefits to families with low income and assets who have children in the household. Almost all benefits go to families where one natural parent of a child is missing. Generally, recipients are single-mother families, where the father of the child is not present. A small fraction of benefits are paid to two-natural-parent families. Most funds for the program come from a federal block grant but states supplement these funds out of their own revenues. The federal funds cannot be used to pay more than five years of benefits to a parent over her lifetime, but states are allowed to set shorter time limits and to pay for benefits beyond the limits out of their own revenues. The program has work requirements which require that a minimum fraction of a state's adult recipients work at least 20-to-30 hours per week or engage in some job-search or other work-related activity. Recipients who do not comply with the work requirements are faced with benefit reduction penalties, including possible termination from the program. The benefit formula—the benefit level and the marginal tax rate on benefits (i.e., the rate at which benefits are reduced as income rises)—is determined by individual states.

The Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp program, provides food assistance to individuals and families with low income and assets.<sup>1</sup> SNAP is an “in-kind” benefit program because it provides assistance for a specific consumption good and hence differs from the TANF program, which provides cash intended for all consumption needs. Also unlike the TANF program, the SNAP provides assistance to all individuals and families, regardless of marital status or the presence of children.<sup>2</sup> The SNAP is entirely a federal program and is funded out of federal revenues, although states contribute a small amount for administrative costs. The federal government sets eligibility requirements and the benefit formula. Recipients of TANF and Supplemental Security Income benefits (see below) are generally automatically eligible for SNAP. There are also other important food-based assistance programs in the U.S., notably two school food programs--the School Lunch Program and the School Breakfast Program--and the Supplemental Nutrition Program for Women, Infants, and Children (WIC).

The Supplemental Security Income (SSI) program provides cash benefits to low-income, low-asset individuals who are over age 65, or who are blind or disabled adults or children. The disabled constitute almost 80 percent of its recipients (Burkhauser and Daly, 2003). SSI is a fully federal program and the federal government sets the income and asset eligibility rules as well the medical eligibility rules to establish blindness or disability, and sets the benefit formula (benefits are indexed to inflation). SSI recipients are generally also automatically eligible for

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<sup>1</sup> We will use the two program names interchangeably, generally using the term SNAP for the current program but the term Food Stamps for the program when we are discussing its characteristics prior to 2008, when the name was changed.

<sup>2</sup> Although the provision has been suspended as of February, 2011, in 1996 a provision was enacted which required all prime-age able-bodied recipients without dependents to either work or, if not working, to be eligible for only three months of benefits in a three-year period.

Medicaid (see below), although some states require extra application or conditions for such eligibility. States can supplement the federal SSI program and all but 6 states did so in December, 2008.

The Medicaid program provides subsidized medical care for a variety of families with low income and assets and thus offers another in-kind benefit. The largest recipient group is low-income mothers and children (and some pregnant women), somewhat similar to the single-mother population from which TANF recipients are drawn. TANF recipients are generally automatically covered, but so are many children with low and moderate incomes who are not on TANF. Benefits are also provided to the low-income elderly for expenditures not covered by Medicare, to the low-income disabled, and to the elderly with nursing-home expenditures. While these latter recipient groups are not as large as the mother-children family groups, they constitute a majority of the expenditures. The program is jointly run by the federal and state governments, with the federal government paying a share of state costs but also regulating the medical services that states must provide. Within federal guidelines, states determine the set of eligible services as well as reimbursement rates, which are quite low, lower than those of Medicare and private payers. For the most part, recipients receive the full set of medical services with a zero copayment as long as their income and assets make them eligible (states set eligibility requirements within federal guidelines), and lose benefits entirely if their income and assets rise above the eligibility point. A closely related program enacted more recently is the State Children's Health Insurance Program (SCHIP), under which the federal government pays a share of state costs for programs that provide medical care to low-income children who are not eligible for Medicaid. States set the eligibility requirements and the services to be provided.

The Earned Income Tax Credit (EITC) provides benefits to individuals and families who have earnings below a threshold. Benefits are provided in the form of a credit in the federal income tax and hence benefit receipt requires that recipients file a federal tax return, even if they have no federal tax liability. The credit is proportional to earnings up to a cutoff point and later declines with higher earnings, eventually reaching zero. The credit also increases with the number of children in the family, up to three children. The earnings levels used to calculate cutoffs in different ranges of earnings are indexed to inflation. Like the SSI program, states can supplement the federal EITC with their own EITC programs.

There are other important means-tested programs in the U.S. Budgets for housing assistance, which provide vouchers for private housing or units in public housing, are similar in size to SNAP or the EITC. But housing assistance is often rationed and average benefits, conditional on receiving benefits, can be quite large. The Head Start program provides preschool children from poor families with school readiness programs, nutritional assistance, and health screening. Programs providing child care assistance, energy assistance, and employment and training are all important. There are dozens of smaller programs as well.

The U.S. has no single comprehensive cash transfer program that covers all poor families and individuals. Instead the country has cash programs that support specific groups (single mothers and their children, the disabled, workers, the elderly) and in-kind programs that subsidize certain types of household expenditure (food, medical care, housing, child care). With this kind of patchwork system, there is clearly a danger that some groups of families or individuals who are poor are not covered at all or are covered only by an in-kind program that helps them with only some forms of consumption. This will become clearer when we discuss receipt of benefits by different demographic groups.



## **Social Insurance Programs**

Unlike means-tested programs, social insurance programs are provided universally to all those who meet relatively minor employment thresholds. Like all insurance programs, these are rationalized by the need to pool coverage over a large group to insure all of them against risk. The U.S. programs insure against risks of unemployment, disability, and old age. Because they are some of the largest programs in the country in terms of expenditure, they inevitably have an impact on poverty even if redistribution and assistance to the needy is not their primary aim. In addition, however, the U.S. programs have specific redistributive elements. For example, eligibility does require contributions in the form of tax payments made from individual earnings or by the individual's employer, implying that poor families with unskilled workers and spotty employment histories may be less likely to qualify. Indeed, many individuals in the U.S. such as nonworking spouses and many youth do not work at all or do not work enough to qualify for benefits. In addition, even with eligibility, benefit levels are based on past earnings and hence those with greater earnings receive greater benefits. Some programs, however (e.g., those in the Social Security system), have a progressive benefit formula which rewards higher earnings with proportionately smaller benefits and hence a lower "return" on their lifetime earnings. This represents another redistributive element in the social insurance system.

The largest of the programs is old-age Social Security (OASI), which provides monthly cash payments to individuals who have made sufficient contributions to the system through their earnings over their lifetime. Individuals can start receiving social security benefits as early as age 62, though actuarially-adjusted payments can be deferred until age 70. Over 95 percent of all workers in the U.S. are part of the system and make earnings contributions. The program is entirely federal and all eligibility rules and benefit levels are set by Congress. The benefit level

is moderately progressive, providing proportionately higher benefits per dollar of lifetime earnings to those with lower levels of those earnings, and benefits are indexed to wages. The program provides not only for retirement benefits for the insured individual, but also for his or her spouse, children under 18, and survivors, regardless of their earnings histories. Higher-income retirees must include their benefits in taxable income under the federal income tax, which adds another progressive redistributive element to the system. The program, together with the Social Security Disability Income program described below, is financed by a regressive payroll tax on all covered workers. Taxes on current workers are used to pay benefits to recipients and to finance a trust fund that will help support future recipients.

Medicare, an in-kind program, provides medical assistance to those over 65 and to Social Security Disability Insurance recipients under 65. The benefits provide for payments for hospital expenses, prescription drugs, and physician charges (coverage for the last of these is voluntary and requires premium payments). As part of the Social Security system, the program is entirely federal in nature and all eligibility rules and benefit formulas are set by Congress. The system is financed through a special addition to the payroll tax and is financed like Social Security.

The Social Security Disability Insurance (DI) program provides cash assistance to workers who have experienced a mental or physical disability that is expected to last at least 12 months and which prevents them from being able to engage in significant work (“substantial gainful activity”). It is a federal program, with the federal government setting eligibility conditions (particularly the complex medical requirements for disability) as well as benefit levels; the latter are set mostly the same way as for the retirement system. Financial eligibility requires sufficient history of earnings in the system, which depends on the age when the disability occurs, and is

part of the financing system for Social Security and Medicare. DI recipients are made eligible for Medicare benefits, usually after a 24-month waiting period.

Another important program for the disabled is the Workers' Compensation system, a state-based system which provides cash and medical benefits to those experiencing a temporary or permanent work-related injury, as well as survivors' benefits to dependents of workers whose death resulted from a job-related accident or illness.

The Unemployment Insurance (UI) program provides cash payments to the unemployed who have been involuntarily discharged and who have adequate pre-unemployment employment and earnings histories in "covered" industries, which include most, but not all, employment. UI is a state-level program and states sets eligibility rules and benefit levels. Benefits are paid for only fixed amounts of time (generally six months), although the federal government subsidizes payments for longer periods during economic downturns. The program is financed by a state tax on employers.

### **Expenditures, Recipients, and Benefits**

Table 1 shows the expenditures, recipients, and monthly expenditures per recipient in the major U.S. benefit programs in 2007 (federal and state combined).<sup>3</sup> Among the means-tested programs, expenditures in the Medicaid program dominate the list. The SSI, EITC, and housing programs are clustered in the \$40 to \$50 billion range. Below them are the SNAP, TANF, and other programs, in decreasing order. Medicaid also has the largest number of recipients, though the relationship between expenditures and recipients differs across programs. School food programs, for example, have almost as many recipients (40 million) as Medicaid but have much

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<sup>3</sup> For prior studies of trends in transfer program expenditure, see Burtless (1986, 1994), Scholz and Levine (2002), and Moffitt (2003a).

smaller expenditure per recipient (last column of the table). The EITC and SNAP also have large caseloads, in the 25 million range, but also provide low expenditure per recipient. The relatively large expenditure in the housing programs is a result of large expenditures per recipient combined with a small caseload. The cash programs which are supposed to cover all consumption needs—SSI and TANF—have relatively high expenditure per recipient, as should be expected, but the caseloads are smaller than those in many of the other programs, and the TANF program is much smaller than SSI.

The social insurance programs that are part of the Social Security system (OASI, Medicare, and DI) have larger expenditures than those of any of the means-tested programs except Medicaid. Of course, they are not as concentrated on low income families. The UI and DI programs have relatively small caseloads; expenditures for the former are large while average UI benefits appear small on an annual basis because they are only received part of the year. The DI program has a high expenditure per recipient and a large expenditure total.

The various programs differ not only in their caseloads and expenditure per recipient but also in the demographic groups they cover. The largest programs provide benefits to the elderly and the disabled. Among working-age families and individuals, the Medicaid program provides benefits primarily to mothers and children. The EITC provides benefits only to workers. The SNAP is the largest unrestricted program, but it only provides assistance for food consumption. The TANF program is the only (relatively) unrestricted cash program, and it has a very small caseload.

The top line in Figure 1 provides a historical perspective on spending per capita since 1970, including the programs listed in Table 1. Expenditures rose over the entire period, including the last decade when many popular commentators have suggested that the U.S. has gone through a

period of retrenchment. The figures for total social insurance and total means-tested programs show that the former have always been larger in magnitude but that both have risen over time. When aggregate spending growth is compared to growth in GDP (not shown), we find that spending grew faster than GDP through the early 1990s but grew at approximately the same rate since that time (for the social insurance and means-tested components as well). Therefore, social welfare spending growth has slowed. In addition, as has been documented extensively elsewhere, the U.S. spends less of its national product on social welfare programs than other developed countries. For example, in 2005 the U.S. expenditure relative to GDP was only 75 percent of the OECD 30-country average (Adema and Ladaique, 2009).

Among means-tested transfers programs, the Medicaid program grew much faster than the others. Although it is not visually obvious from Figure 1, per capita expenditures on means-tested transfers other than Medicaid also grew dramatically over the long run, almost tripling between 1970 and 1995 (\$260 to \$740). However, this growth was concentrated in the 1970-1975 and 1990-1995 periods, and spending has been essentially stable since 1995. Figure 2 shows how these trends are reflected in the growth of individual programs. From 1970 to 1995, expenditure on the AFDC program was relatively flat but there were strong increases in expenditure on SSI, the EITC, housing, and Food Stamps. Expenditure growth in the SSI and EITC programs was particularly strong in the 1990-1995 period, both a result of expansions in program benefits and eligibility (Burkhauser and Daly, 2003; Hotz and Scholz, 2003). The stable average growth in total spending (excluding social insurance) after 1995 has been a result of offsetting dramatic declines in the TANF program—a result of major contractionary reforms in that period (Moffitt, 2003b; Blank, 2002)—and dramatic increases in SNAP spending, a result of programmatic reforms during that period (Klerman and Danielson, 2009). Spending in the

other programs was stable. Medicaid grew continually over all periods, as a result of growth in the price of medical care, extensions of program eligibility, and other reforms resulting in caseload growth (Gruber, 2003).<sup>4</sup>

Figure 3 shows historical growth of expenditures in social insurance programs. The medical program for the elderly, Medicare, is responsible for the largest share of long term growth. The DI program has also grown strongly since 1990, a result of expansions in eligibility and other reforms (Krueger and Meyer, 2002).

The growth in overall social welfare spending in the U.S. may not accurately reflect the experience of all demographic groups since benefit growth rates and coverage vary across programs. Unfortunately, a time series of benefit receipt by demographic group is not available, but Scholz et al. (2009) computed figures from the nationally representative Survey of Income and Program Participation conducted in 1984, 1993, and 2004. As shown in Table 2, expenditures in 2004 were much greater for elderly and disabled than other families (see the footnote to the table for exact definitions of the groups). In contrast, expenditures on single parent families and the nonemployed fell. Expenditures on two parent families and the employed, while always smaller than for other groups, rose over time. Thus there has been a significant redistribution of expenditure despite the overall growth.<sup>5</sup>

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<sup>4</sup> Figures showing how these expenditure trends break down into trends in recipients per capita and expenditures per recipient are available upon request from the authors. See Moffitt and Scholz (2010) for a discussion of such a decomposition.

<sup>5</sup> This table is an extension of Table 3 in Scholz et al., showing 1984 and 1993 results as well as more detail on benefit receipt. Several minor refinements were made in the tabulations as well.

## **Section 2: Impacts on Poverty**

The effectiveness of anti-poverty programs depends, at least in part, on whether the programs do, in fact, reduce poverty or, more generally, raise the incomes of the low-income population. On one level, it is obvious that they must do so to some extent, since they provide positive benefits and hence they have to raise incomes holding everything else constant. However, the magnitudes of their effects are not so obvious. For example, social insurance programs are not targeted on the poor population per se and hence it is possible that most of their benefits go to non-poor families. In addition, many of the means-tested programs have income eligibility levels above the poverty line and some non-poor families therefore receive benefits. Even for benefits provided to those below the poverty line, an important question concerns their distributional impact and whether they affect primarily those at the very bottom of the income distribution or those just below the poverty line, for example. Another distributional question is whether the programs lower poverty disproportionately among some demographic groups, leaving others relatively underserved.

When measuring the impacts of programs on poverty, an overall conceptual issue is whether any single arbitrary line should be used, rather than a more general examination of program effectiveness for specific segments of the low-income population. We address this issue below by showing impacts of the benefit programs for families in parts of the distribution above the poverty line as well as below it. Many studies in the literature take a different approach to this problem by assigning weights to families who are in different locations in the income distribution, with the goal of deriving a single overall index of poverty, or of inequality in general, and of the impact of benefit programs on such an index (see Ziliak (2005) for a recent survey of these alternative measures). We shall not review that literature or employ that

approach in our examination. Instead, we use simpler indicators of distributional impacts above and below a particular poverty line. Another issue is how to define the poverty line itself, given that one wishes to do so; we discuss alternative definitions of the poverty line below.

Yet another issue is how one should address the existence of behavioral effects of public programs, which can alter estimates of poverty impacts. One type of behavioral effect occurs when individuals change their behavior to become eligible for benefits when they were not initially. They may reduce their levels of work, reduce savings to avoid asset ineligibility, or alter their family structure to avoid having other income-producing persons in their household. A related type of behavioral effect occurs when individuals reduce their work effort to increase their benefit levels, since most programs pay higher benefits to those with lower income. Ignoring these behavioral responses will generally lead to overestimates of the impact of programs on poverty, for the levels of non-transfer income (earnings and other private income) observed in the data are lower than they would be in the absence of the program. Most analysts examining the poverty impacts of transfer programs ignore this issue for practical reasons—it is difficult to estimate behavioral effects with reliability, and would be complex to do for the full set of U.S. programs—and treat their estimates as upper bounds of the poverty impacts of programs. We do the same in this section but will discuss behavioral responses, separately, in the next section and will provide some rough estimates of how they affect poverty-impact calculations. We will conclude that, while such responses are almost surely nonzero for many programs and demographic groups, they are unlikely to be large enough to change significantly the unadjusted impacts usually reported.



## Poverty Impacts

Determining the impact of benefit programs on poverty requires data on individuals and families, their incomes, and the benefit amounts they have received. There is a large literature using the microdata files from the Current Population Survey (CPS) for this purpose, for microdata files are available from the 1960s to the present (Danziger et al., 1981; Ziliak, 2005, 2008; Meyer and Sullivan, 2009). However, the CPS has the disadvantage of requiring respondents to report annual totals of their benefit receipt and other forms of income in the most recent calendar year, and there is significant misreporting in response to those questions (Meyer et al., 2007). A better data set is the Survey of Program Participation (SIPP), which asks questions about income and benefit receipt for each of the four months prior to an interview. Recall error is less problematic given the shorter reference period. In addition, as its name implies, the survey has as one of its main purposes the measurement of program participation and benefits, and more attention was paid to these questions than in the more general-purpose CPS questionnaire. The disadvantage of the SIPP is that it is not available prior to 1984, so that a historical picture prior to that time is not available.

Given the advantages of the SIPP, we draw on the recent studies of Scholz et al. (2009) and Moffitt and Scholz (2010) for our presentation of poverty impacts of benefit programs. These authors examined data from three SIPP files—1984, 1993, and 2004—and computed measures of monthly pre-transfer income—defined as earnings plus non-transfer unearned income minus payroll and income taxes—and post-transfer income, where the latter includes all major cash and in-kind means-tested and social insurance programs (except Medicaid and Medicare; see below).<sup>6</sup> Although underreporting in the SIPP is less severe than in the CPS, there appeared to

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<sup>6</sup> The authors included TANF, SSI, SNAP, WIC, Veterans' Benefits, foster child payments, housing assistance, general assistance, other welfare, OASI, DI, WC, and UI benefits in income, as well as two tax credits—the EITC

still be some underreporting when SIPP aggregates were compared to administrative totals, so the authors also adjusted their data upwards to match those totals where appropriate.

In Table 3, we provide statistics on the pre- and post-transfer distribution of income and poverty making use of SIPP data.<sup>7</sup> The pre-transfer entries for 2004 show that 29 percent of U.S. families were below the poverty line before transfers.<sup>8</sup> The monthly poverty gap, defined as the aggregate dollar amount needed to raise all families below the poverty line up to the poverty line, was \$28 billion in 2004. Twenty-one percent of families were below 50 percent of the poverty line—commonly called “deep poverty”—and almost 40 percent were below 150 percent of the poverty line, which includes what are sometimes called the “near poor” (those between 100 percent and 150 percent of the poverty line). The post-transfer columns in the second half of the table show the same poverty statistics after transfers are included in income, although Medicaid and Medicare are excluded because the data did not provide sufficient information on total medical expenses for each family and because these programs are far from being equivalent to cash. The results indicate that the benefit system reduces the poverty rate to 13.5 percent, almost a 16 percentage point reduction, and reduces the poverty gap by about two-thirds. The benefit system reduces deep poverty by slightly less (15 percentage points) but also reduces the percent poor and near-poor combined by over 14 percentage points. Thus a high portion of transfers go

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and the child tax credit. For other uses of SIPP to estimate poverty impacts, see Weinberg (1987) and Scholz and Levine (2002).

<sup>7</sup> Table 3 is a modified and updated version of some of the elements of Table 1 in Scholz et al. (2009). It does not match that Table exactly because of several minor refinements. Pre-transfer income was defined as the sum of earnings and non-transfer nonlabor income minus income and payroll taxes. Federal and state income taxes were computed from the NBER TAXSIM program (Feenberg and Coutts, 1993) and payroll taxes were directly calculated using official tax rates. In the computation of income taxes, the EITC and the child tax credit were excluded since those credits were counted as transfers.

<sup>8</sup> The study used the poverty thresholds in the SIPP, which are very close to the official U.S. Bureau of the Census thresholds but differ slightly because the SIPP thresholds use month-to-month household composition.

to families above the poverty line. Overall, the benefit system clearly has a major impact on poor and near-poor families.

The table also shows the impact of the system in 1984 and 1993 for comparison. Pre-transfer poverty has declined slightly but pre-transfer deep poverty increased somewhat, a result of growing family inequality in the U.S. and declines in real private income at the bottom of the distribution. The increase in deep poverty rates also appears after transfers are included and, in fact, the post-transfer increase from 1984 to 2004 is greater than the pre-transfer increase. This reflects the fact that the impact of the system on those in deep poverty has declined over time. The impact of the system on the poverty rate, for example, was higher in 1984 and 1993, and almost three-quarters of the poverty gap was eliminated instead of two thirds (a sign that the system in 2004 moved more families just below the poverty line to above it than previously). The percentage point reduction in deep poverty was also greater in the prior years, but the percentage point reduction of those below 150 percent of the poverty line is greater in 2004, a sign that relatively more funds are going to the near-poor rather than the poor (see below for more detail).<sup>9</sup>

The U.S. government poverty statistics have received major critiques from the research community for many years and, in 1995, the National Academy of Sciences (NAS) proposed an improved measure (Citro and Michael, 1995). The Scholz et al. measure already addresses one of the major critiques of official statistics, which is their exclusion of major in-kind transfers such as SNAP and housing assistance as well as major tax credits such as the EITC and Child

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<sup>9</sup> See Sherman (2009) for an analysis using the Current Population Survey which also shows a declining impact of the means-tested transfer system over time.

Tax Credit, and income and payroll taxes.<sup>10</sup> The Scholz et al. measure, however, did not exclude other expenses that the NAS recommended be subtracted from income—specifically, child care and other work-related expenses, and out-of-pocket medical expenses—and Scholz et al. did not use the threshold recommended by the NAS and used in subsequent Census Bureau exercises examining the implications of the alternative poverty threshold, which is based on expenditures and uses a different family-size scale adjustment.

For the purposes of this chapter, we recomputed the Scholz et al. 2009 poverty statistics with these modifications, with the results shown in Table 4 (see Appendix A for details). The exclusion of additional expenses from income raises the pre-transfer poverty rate, as expected, from 29.0 percent to 33.8 percent. The use of the expenditure threshold raises it further to over 37 percent, a sign that the expenditure threshold is higher than the official government poverty threshold. Using a poverty measure that includes out-of-pocket medical expenses in the threshold instead of subtracting it from resources, an alternative suggested by the Census Bureau (Short, 2001; Garner and Short, 2008), has only a small effect, reducing poverty slightly. More notable is that the NAS measures imply that the benefit system has a slightly greater impact on those with the lowest incomes and a slightly lesser impact on those with the highest incomes (i.e., the near-poor). For example, the Scholz et al. measure indicates a 14.7 percentage point reduction in deep poverty compared to a 16-to-17 percentage point reduction for the NAS measures; and the Scholz et al. measure indicates a 14.3 percentage-point reduction in the percentage below 150 percent of the poverty line compared to an 10-to-14 percentage point reduction for the NAS measures. The former difference likely arises because many of those with significant child care and work-related expenses had pre-transfer incomes between 50 percent and 100 percent of the

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<sup>10</sup> The NAS, like Scholz et al., proposed excluding Medicare and Medicaid because of the difficult conceptual issues that arise in placing a value on the in-kind provision of health insurance and care.

poverty line according to the Scholz et al. measure, but are pulled down just below the 50 percent threshold after those expenses are deducted from income. Government benefits then push them out of deep poverty. Likewise, many of those with pre-transfer incomes above 150 percent of the poverty line according to the Scholz et al. measure are pulled below that threshold when child care and work-related expenses are deducted. They receive few, if any, government benefits and therefore their poverty status is largely unaffected by transfers.

Another issue explored by Scholz et al. was the poverty impact of different benefit programs, allowing a determination of which programs were most responsible for the reduction in poverty rates. As shown in Table 5, OASI, Medicaid, and Medicare have the largest impact at all poverty levels (pre-transfer levels are shown in Table 4, row 1).<sup>11</sup> The fact that two of these programs are less valuable than cash must temper this conclusion. In addition, these programs were not included in Table 3, so they are not responsible for the reduction in poverty shown there. The first column of Table 5 shows that OASI was the most important program, reducing the poverty rate from 29 percent to 21 percent, a full 8 percentage point reduction, more than half the reduction from 29 percent to 13.5 percent shown in Table 3. Other programs contributed modest amounts to the reduction in poverty: the DI program reduced the poverty rate by almost 2 percentage points and the EITC reduced it by about 1 percentage point, as did the UI program. Other programs contributed fractions of a percentage point. While these figures are small, they roughly add up to the total reduction shown in Table 3.<sup>12</sup>

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<sup>11</sup> The valuation of Medicaid is based on that of HMO plans and the valuation of Medicare is based on fee-for-service plans. See Scholz et al. (2009) and Moffitt and Scholz (2010) for details.

<sup>12</sup> There is some overlap in the reciprocity groups of the programs, so the poverty reductions for each program alone should not be expected to add up exactly to the aggregate reduction.

While the impact of most individual programs on overall poverty is not large, they are often targeted on specific demographic groups and have more impact there. Table 6 shows the impact of the benefit system on some such groups. The system has the largest impacts on the disabled and elderly, whose poverty rates in 2004 were reduced by 53 and 46 percentage points, respectively. Those programs were particularly effective in reducing deep poverty and the poverty gap, reducing them almost to zero among these groups. The OASI, DI, and SSI programs are mostly responsible for these effects.<sup>13</sup> There were also significant reductions in poverty for single parent families, arising from TANF, Food Stamps, housing assistance, and the EITC. On the other hand, two-parent families and childless families and individuals, who have lower poverty rates to begin with and are generally not targeted by most programs, saw the smallest poverty reductions. Interestingly, however, the nonemployed had the highest pre-transfer poverty rates (over 80 percent) but benefits reduced their poverty rates by about 14 percentage points, close to the reduction for single-parent families. Consequently, the post-transfer poverty rate for the nonemployed was a very high 67 percent.

The major difference in the impacts of the benefit system across demographic groups between 1984 and 2004 is that the system reduced poverty rates of single-parent families and the unemployed by much more in 1984. Poverty rates for the former group were reduced by over 25 percentage points in 1984 and those for the latter group were reduced by 24 percentage points. These results reflect a redistribution of expenditure across demographic groups, as we noted in Table 2 above. We can now, however, examine in more detail how expenditures vary across groups. Table 7 shows the distribution of expenditure per family by poverty level in 1984 and 2004 for the groups. For those in pre-transfer deep poverty, expenditures have fallen not only for

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<sup>13</sup> There are some important issues regarding comparisons of poverty measurement for the elderly vs the non-elderly, which we do not address. See Deaton and Paxson (1998).

single-parent families and the nonemployed, but also for two-parent families and the employed. Indeed, in 2004, families with pre-transfer incomes between half the poverty line and the poverty line received more transfers than those in deep poverty. Only elderly and disabled families in deep poverty have seen an increase in expenditure. In addition, all groups, even single parents and the nonemployed, have experienced increases in expenditure if their pre-transfer income put them between 50 percent and 100 percent, or between 100 percent and 150 percent, of the poverty line. In fact, the very largest increases occurred for the highest income groups. This shows clearly that there has been a double redistribution of expenditure in the U.S. over time: within groups, expenditure has been redistributed from the very poor to the less poor and near poor and, across groups, expenditure has been redistributed from the nonelderly, nondisabled to the elderly and disabled

Further analysis of the data reveals which programs are responsible for these trends.<sup>14</sup> Not surprisingly, the redistribution within single parent families has resulted from a decline in AFDC/TANF expenditures for those families in pre-transfer deep poverty and an increase in EITC payments for those with higher incomes. However, there has also been a similar redistribution in Food Stamp program expenditures on single parent families, for those expenditures have fallen for those with the lowest pre-transfer incomes. This may be a result of the reduction in Food Stamp receipt among AFDC recipients which occurred after 1996 welfare reform, when many families lost easy access to the program.<sup>15</sup> Food Stamp expenditures on higher-income single parent families have risen, however. The data also reveal that the redistribution of expenditure within the population of two-parent families resulted from a similar

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<sup>14</sup> A table showing the program-by-program breakdown for Table 7 is available upon request.

<sup>15</sup> See Todd et al. (2010). This trend may have reversed since 2004, for Food Stamp receipt has dramatically risen since that year.

shift for the same three programs—AFDC/TANF, Food Stamps, and the EITC--from lower-income to higher-income families. For the nonemployed group, expenditures fell for the lowest-income group because of, again, reductions in the AFDC/TANF and Food Stamp programs, indicating that this trend is related to that for single-parent and two-parent families, albeit ones without an employed adult in the family. Expenditure increases for nonemployed families at higher income levels have been partly a result of increases in UI payments but even more from increases in OASI payments, an indication that an elderly family member is living in the home.<sup>16</sup> Finally, the strong growth of expenditures among the elderly is a result of an increase in real average OASI benefits received among recipients (who constitute almost 100 percent of the elderly), and the growth of expenditures among disabled families is a result of increases in both reciprocity rates and average benefits received from the DI and SSI programs.

### **Section 3: Behavioral Incentive Effects**

As noted previously, estimates of the effect of a benefit program on poverty can be misleading if it generates significant behavioral effects that lead to changes in income. In that case, the income of a recipient family in the data is not the same as the income the family would have had in the absence of the program. In the language of causal analysis, what is needed is the counterfactual income that the family would have had if it had not received benefits. If that income could be determined, the difference between it and post-transfer income would be the correct measure of the impact of a program on income and therefore on poverty.

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<sup>16</sup> Also, some heads who have retired before 62 are in this group, as the elderly group is defined as having a head 65 or older.



The literature on the behavioral effects of transfer programs is large in some ways but, in other ways, quite small for the purposes of assessing corrected poverty impacts. On the one hand, there is quite a large literature spanning several decades on the work incentives of different transfer programs, and most major transfer programs have been studied for this particular outcome. There are significant, though smaller, literatures on the effects of different programs on education and human capital formation, savings and asset accumulation, migration, family structure, and other outcomes. On the other hand, most of these studies do not translate the behavioral effects they find, assuming they find significant ones, into estimates of counterfactual incomes, which requires a separate and non-trivial additional exercise. In addition, many of the studies in the literature are concerned with estimating the behavioral impacts of specific reforms in a program's structure or rules that might occur in the future, or of some specific reform that the program has experienced in the past. This is not useful for the purpose here, for here we need to know the effect on behavior induced by the program's existence, which means that we need an estimate of what behavior would be in the complete absence of the program. Estimates of those effects are necessarily much harder to obtain, not the least because direct observation of behavior without the program in place is generally not possible, implying that extrapolation must be used for such an estimate.

In light of these issues, we assess the research literature on the actual incentives found for each outcome for each program and then form rough guesses of what their impacts on income in the absence of the program might be. In the rest of this section, we review the literature on each program to arrive at our best estimate of its numerical impact on the income of its recipients, and we then recalculate the pre-transfer incomes in the SIPP sample to gauge the magnitude of the bias from behavioral effects in our prior estimates of poverty impacts.

We should note at the outset that we will be making adjustments to our poverty impacts only for behavioral effects on work effort, so our discussion of effects on that outcome will constitute the bulk of this section. Our reasons for not adjusting our impacts for behavioral effects on other outcomes are given below.

### **Work Effort**

The theoretical effects of a benefit program on labor supply using the static labor supply model which appears in most economics textbooks depends on the type of program it is. Most textbooks analyze a classic cash means-tested transfer program which, in the simplest possible case, offers a guaranteed income for those who do not work (and hence have no labor income) and which taxes their benefit away by reducing the benefit with increases in work effort and therefore earnings. This type of program has an unambiguously negative effect on labor supply. However, the theoretical effects of in-kind transfer programs are ambiguous in sign because they depend on the complementarity vs. substitutability of the subsidized good and labor supply. If the subsidized good and labor supply are complements, labor supply can be increased by the program (Gahvari, 1994). On the other hand, the evidence for this effect is quite weak (Currie and Gahvari, 2008). Quite different also are earnings subsidies which, in their classic form, subsidize work up to some point and then tax it away as the subsidy is phased out. Labor supply effects are presumed to be positive in the first phase and negative in the second. Transfer programs with a strictly enforced work requirement—that is, benefits are paid if and only if the recipient works some minimum number of hours per week—have, like the EITC in its subsidy range, a positive effect on labor supply for those recipients who would have worked less than the minimum in the absence of the program and a negative effect only for those who would have

worked above it. Social insurance programs are even more complex because they may affect labor supply prior to actual receipt of the benefit and hence may have intertemporal effects.

As regards the first type, classic cash means-tested programs, there are virtually none in the U.S. of this type. One that is close is the SSI program for the elderly, which offers benefits to the poor individuals over 65 and presents them with a guaranteed income and a benefit which is taxed away with additional work. Unfortunately, there have been no studies of its labor supply effects for the general elderly low-income population.<sup>17</sup> There has been, however, a study of its effects on the labor supply of elderly immigrants, who were denied SSI benefits following 1996 federal legislation, thus allowing an observation of the impact of eliminating the program altogether (Kaushal, 2010). The estimates of effects on hours worked of the over-65 population varied across specifications and were often insignificant, but a rough point estimate is that the program reduces weekly hours of men by about 10 hours per week but increases it by about 6 hours per week for women.<sup>18</sup> At a 1996 minimum wage of \$4.75 and assuming 50 weeks of work per year, these figures translate into -\$2,375 and \$1,425 for men and women, respectively.

The SSI program for the disabled is also similar to a classic means-tested program, although its complex entry requirements make it difficult to determine the counterfactual labor supply of those who make it through the process and onto the program. Again, however, there have been no studies of its labor supply effects, although estimates for the more heavily-studied DI program may provide relevant evidence. We discuss that program below.

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<sup>17</sup> There has been a study of its effects on pre-retirement labor supply (Neumark and Powers, 2000).

<sup>18</sup> See Kaushal (2010), Tables 4 and 5, Hours Worked, Model 3, estimates for the foreign-born and non-citizens, 65-69 and 70-74. The author hypothesizes that the counterintuitive results for women could have been the result of intrafamily labor supply substitution. The figures in the text above are averages over the four entries in the author's tables, divided by an estimated 10 percentage point decline in SSI participation as a result of the reform (personal correspondence with author). The figures apply only to those 74 and under. We assume the program has no work disincentives above that age.

The most well-known cash means-tested program, the TANF program, does not fit the classic type because of the presence of work requirements and time limits. Work requirements, as noted previously, provide work incentives rather than disincentives for those with low counterfactual hours of work. Time limits should also provide work incentives insofar as they induce recipients to work more to accumulate work experience in anticipation of a higher probability of having to exit the program in the future, or induce women to leave welfare altogether to “save” their benefit years for the future, which should also increase work effort. Unfortunately, once again, there have been no studies estimating the labor supply effects of the current TANF program.<sup>19</sup> However, significant work requirements and time limits were only introduced in the 1990s and, prior to that, the program resembled a classic means-tested transfer program. There were many studies of the labor supply disincentive effects of that program (AFDC) which can be considered to be an upper bound for those of the current program.

Reviews of that literature by Danziger et al. (1981) and Moffitt (1992) indicated that econometric estimates showed that recipients would work between 1 hour and 10 hours more per week if the program did not exist (recipients worked 9 hours per week on average, so this implies that they would work 10 to 19 hours per week in the absence of the program). The wide dispersion in estimates was a result of disagreements across studies, which is likely to have partly arisen because the exercise required extrapolating the effects of marginal variations in benefits down to zero. A possibly more accurate estimate comes from the negative income experiments of the 1970s which, though testing a somewhat different program, nevertheless provided direct estimates of the effect of introducing a new program de novo. Burtless (1987) not only provided a comprehensive review of the results of the experiments but he also used

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<sup>19</sup> By this we mean a study estimating the counterfactual hours of work of current recipients.

them to estimate the income “leakage” in the program, which is the object of interest here. If the income of a recipient is written as  $Y=E+B$ , where E stands for earnings and B is the program benefit received, then the actual income change from the introduction of the program is  $\Delta Y=\Delta E+\Delta B$ , which is smaller than the  $\Delta Y=\Delta B$  we have used in our poverty-impact calculations, if  $\Delta E<0$ . Burtless used the experimental estimates to calculate  $\Delta Y/\Delta B$  for single mothers, which is the factor by which the observed difference in income should be reduced to arrive at the true increase in income. His maximum estimate was .80 for a program with a guarantee level much higher than that for the AFDC program.<sup>20</sup> In summary, the literature suggests that our estimates of poverty reduction for TANF recipients in the last section should be reduced.

There have also been a number of studies of the SNAP and its predecessor, the Food Stamp program. Most analysts believe this program is inframarginal in the sense that it is equivalent to cash because the food subsidy amounts are usually below the food consumption levels of recipient families prior to receiving benefits. In this case, the theoretical prediction is the same as that for a classic means-tested cash transfer program. Currie (2003) surveyed the literature and found that most studies estimate the program to have only small or zero effects on labor supply, with the maximal estimate suggesting a one-hour-per-week disincentive. These small estimates are generally attributed to the small size of the benefit relative to income, but it is also possible that recipients do not perceive the benefits as equivalent to cash. These estimates, however, are even more problematic than were those for AFDC because benefits in the latter program vary across states whereas those in the former do not, at least holding fixed the family’s eligibility characteristics and other asset and income amounts. Hence, finding benefit variation to extrapolate down to a zero benefit is particularly troublesome. Hoynes and Schanzenbach (2007)

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<sup>20</sup> See Burtless (1987, p.44). He finds the estimates to be very sensitive to the simulation model used.

instead used the introduction of the Food Stamp Program in the 1970s to estimate the work disincentives of the program, thus providing more direct evidence of the effect of the program relative to no program. They found negative effects of the program on labor supply but the estimates were small and almost always insignificant. We therefore do not adjust for behavioral incentives for this program.

Other in-kind programs are not inframarginal because they appear to constrain spending. Early estimates of the work effects of the Medicaid program were typically small or insignificant (Moffitt, 1992, p.18). Subsequent studies, though they have concentrated on the effects of Medicaid expansions and other reforms on labor supply and not on the effects of eliminating the program altogether, have produced a variety of findings but the most recent indicate essentially a zero effect (Gruber, 2003; Ham and Shore-Sheppard, 2005).<sup>21</sup> Thus the labor supply effects of Medicaid appear to be minimal, and we make no adjustment. There has also been research on the labor supply effects of subsidized housing. Early work showed mixed results, with effects on earnings of 4 percent but with many studies showing smaller or zero effects (Olsen, 2003). However, a recent study using randomized participants from a waiting list in Chicago indicates earnings effects of 11 percent and employment effects of 4 percentage points (Jacob and Ludwig, forthcoming). Thus there appear likely to be non-trivial effects of subsidized housing programs on income, making our estimates of poverty impacts from these programs an overestimate. We will adjust the incomes of housing recipients using the Jacob-Ludwig estimates.

The EITC, as noted previously, should be expected to increase labor supply in the subsidy region and to decrease labor supply in the phaseout region. Consequently, our estimates of poverty impacts should be expected to understate those impacts in the former region and

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<sup>21</sup> There have been a number of studies of the effect of Medicaid on AFDC participation (Gruber, 2003), but these are not directly related to labor supply.

overstate them in the latter. Unfortunately, while there have been a considerable number of studies estimating the labor supply effects of the EITC, they have not provided separate estimates for the different groups but only net effects overall. The evidence suggests that the program has had a positive impact on the employment rates of single mothers but no effect on their hours of work if working, little or no effect on the labor supply of married men, and small negative effects on the employment rates and hours of work of married women of approximately 1 percent and 1-to-4 percent, respectively (Hotz and Scholz, 2003; Eissa and Hoynes, 2006). The last of these would have only a small effect on our estimates of the poverty impacts of the EITC. These effects are too small to make any significant difference, and we therefore make no adjustment for the EITC.

There has been a large amount of research on the labor supply effects of the leading social insurance programs although, in virtually all cases, ignoring the effects of financing and just treating the recipients as standard benefit recipients with labor supply effects. The largest amount of research has been conducted on the OASI program, where a vast literature has estimated the effects of the retirement program and incremental reforms of it on the retirement age (Danziger et al., 1981; Lumsdaine and Mitchell, 1999; Krueger and Meyer, 2002). While all analysts agree that the program should be expected to reduce both of these outcome variables, there is no agreement on the magnitude of the effects, with some studies showing little effect and others estimating large effects. In the absence of a consensus, we assume that the program reduces the employment rate of men at age 62 by 15 percentage points, the estimate reported in Lumsdaine and Mitchell, which is lower than the 19 percentage points reported by Gustman and Steinmeier (1986) but larger than the 12 percentage points in the Danziger et al. (1981) summary of early work. We assume that this reduction declines linearly to zero by age 70. We estimate

average pre-retirement earnings of men in the SIPP at age 55-60 to be \$59,892 (2007 dollars), and assume that those retirees who would have continued working at their pre-retirement job instead of retiring would have had that level of earnings.<sup>22</sup>

The labor supply effects of the Medicare program have been much less studied but there have been a few estimates. The literature notes that Medicare should provide an incentive to retire early, at least for those who have health insurance on their pre-retirement job and do not expect to have retiree health insurance coverage in the absence of Medicare. Once again, however, estimates of the effect of the program have ranged from finding almost no effect (Gustman and Steinmeier, 1986; Lumsdaine et al., 1994) to those finding very large effects (Rust and Phelan, 1997). We use estimates from a recent study by French and Jones (2010) who address many of the limitations of prior studies. Their estimates are smaller than those of Rust and Phelan but somewhat larger than those of Blau and Gilleskie (2008), and indicate reductions in employment rates of men between zero and 4.2 percentage points, depending on the age between 59 and 72. We use the same estimated level of pre-retirement earnings referred to above to arrive at an impact of earnings at each age.<sup>23</sup>

The labor supply effects of the DI program have been heavily studied (Bound and Burkhauser, 1999; Krueger and Meyer, 2002), particularly in an attempt to explain whether the program has contributed to a decline in the employment rates of older men over the past several decades. Once again, there is little consensus in the literature on the magnitude of the effect, although all analysts agree that it is not zero. Perhaps the simplest methodology used is that of Bound (1989), who used the labor supply rates of denied applicants as an upper bound for the

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<sup>22</sup> We ignore the fact that retirees may have nonzero post-retirement hours of work and earnings, as there are too few good estimates of the relevant effects.

<sup>23</sup> We thank French and Jones for providing new simulations from their model with these estimates.



amount that accepted applicants could have worked. Estimates from a refined application of the methodology by French and Song (2009), who also estimated impacts on earnings, indicated that the program reduces annual earnings by \$2,203 (2006 dollars).<sup>24</sup> We take this as our best estimate of the impact of the DI program and employ it in our simulations.

As noted above, we will use the DI evidence as an upper bound estimate of the labor supply effects of the SSI-disabled program. Differences in the populations of the two programs suggest that the DI work incentives should be greater than those in the SSI-disabled program (Burkhauser and Daly, 2003, p.125). For example, SSI-disabled recipients have much weaker employment histories than do DI recipients, a reflection of the different eligibility criteria for the programs. This is the reason for our assumption that our subsequent SSI calculations are an upper bound.

There is a very large literature on the effects of UI benefits on unemployment spell lengths with, as is typical, a considerable dispersion in estimates (Krueger and Meyer, 2002). We take our figures from the recent study of Chetty (2008), whose estimates fall within the range of prior ones, because he provides estimates of mean unemployment spell lengths and pre-retirement earnings, which we can use to translate the effect of a change in weeks not worked to one on annual earnings. Averaging over the groups that are liquidity constrained and those that are not (the main focus of Chetty's study), and translating his estimated effects on unemployment spell lengths into annual earnings (individuals rarely receive UI for a full year), yields a disincentive effect of \$3,585 (1990 dollars). We take this as our estimate of the effect of the UI program on annual earnings.

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<sup>24</sup> French and Song note that this is probably not an upper bound for the effect, since some of those who are denied benefits are not working awaiting an appeal of their denial. They find that 19 percent of denied applicants are allowed benefits within five years. See Chen and van der Klaauw (2008), Maestas and Yin (2008), and Von Wachter et al. (forthcoming) for other recent studies.

The literature on the disincentive effects of the Workers' Compensation system is somewhat smaller than that for UI. In the absence of a study which provides the same level of detail needed to estimate annual earnings impacts for this program as the Chetty paper did for UI, we take the estimate in Krueger and Meyer (2002, p.2384) that the work disincentives of the program are about three-quarters of that for the UI program, implying an estimate of an annual earnings disincentive of \$2,689 (1990 dollars).

### **Other Outcomes**

There are literatures of varying size on the effects of transfer programs on savings and asset accumulation, education and human capital formation, fertility and marriage, and other outcomes. Our interest, however, is not on whether transfer programs have effects on these outcomes per se, but whether they translate into effects on earnings and other forms of income, which is all that our poverty-impact estimates are determined by. In principle, a study of work effort which was based on an ideal experiment comparing earnings of the entire population in the presence and the absence of the program would capture all effects on earnings which work indirectly through savings, human capital accumulation, and family structure. The studies of work effort reviewed above, however, often condition on assets, education and work experience, and family structure, which means that the indirect effects may not be captured. In addition, some of the other outcomes may affect private unearned income, which the work effort studies will not capture by definition. Nevertheless, it is likely that the work-effort studies are already capturing at least some of the effects that arise through other outcomes.

Regarding savings and asset accumulation, Hubbard et al. (1995) posited that the asset limits in means-tested transfer programs reduce savings but Hurst and Ziliak (2006), Engelhardt

et al. (2008), and the Medicaid studies reviewed by Gruber (2003) provide mixed empirical evidence on the magnitude of the effect.<sup>25</sup> There has been little work on asset accumulation effects for other means-tested transfer programs. There has been an enormous number of studies of the effect of OASI on savings (Feldstein and Liebman, 2002) but, again, with little consensus on the magnitude of the effect. There has been much less work on the savings effects of other social insurance programs. This literature, therefore, is far from providing sufficiently reliable estimates for us to simulate the effects of the programs on the counterfactual incomes of current program recipients arising from a savings channel.

The literature on the effects of transfer programs on human capital accumulation is quite small. In theory, means-tested transfer programs lower the return to human capital investment because they tax both current and future earnings (at least while in the program) to the extent recipients are in a phase out region of a program. The subsidy region of the EITC has the opposite incentives. At the same time, the taxation of earnings also lowers the opportunity cost of taking time away from work to invest in human capital and, in addition, benefits may reduce the barriers to investment posed by liquidity constraints. Evidence from the negative income tax experiments suggested that unconditional, open-ended transfers increased school enrollment of youth as well as short-run scholastic outcomes (Hanushek, 1987). But the single study of the effect of AFDC participation on wage rates found it to have negative effects (Moffitt and Rangarajan, 1989).<sup>26</sup> In a study of the EITC, Heckman et al. (2003) found that the EITC lowered wage rates. Once again, however, this literature is too sparse and imprecise to allow us to form

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<sup>25</sup> Also see Scholz and Seshadri (2009) for evidence that the Hubbard et al. findings were a result of greater numbers of children in low-income households.

<sup>26</sup> There is a larger literature on the effect of reforms of the welfare system on wage rates (a recent study is Grogger, 2009), but these are not directly useful for the question at hand, as noted previously.

reasonable estimates of the effects of transfer programs on education and wage rates, much less to translate them into effects on pre-transfer income.

There has been a significant amount of work on the effect of the AFDC/TANF program on fertility, marriage, and living arrangements. However, the early work on the issue showed evidence of a small effect (Moffitt, 1998, 2003b), while extensive studies of the effects of welfare reform (Blank, 2002; Grogger and Karoly, 2005) likewise have shown little effect on such outcomes. Studies of the effect of the Medicaid program on family structure likewise produce mixed evidence (Gruber, 2003). There has been considerable attention paid to marriage effects of the EITC but the available empirical studies show no significant effect of this kind as well (Hotz and Scholz, 2003). Thus, studies of the programs that have been conducted indicate no major effects of participation on family structure. Most programs have not been studied for these outcomes. We make no adjustment for this channel.

## **Simulations**

Our review suggests that there are likely to be work disincentives effects for three means-tested programs (SSI, TANF, and Housing Assistance) and for five social insurance programs (OASI, DI, Medicare, UI, and Workers Compensation). We estimate the effect of these disincentives on our prior poverty impact calculations by modifying the earnings of the recipients of each of these programs by the amounts indicated in our review, and by then recalculating our four pre-transfer poverty measures. We conduct the analysis only for 2004.<sup>27</sup>

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<sup>27</sup> More details on the calculations are given in Appendix B.

Table 8 shows the pre-transfer poverty measures for the programs in question, to be compared to those in the pre-transfer columns of the first row of Table 3. The comparison indicates that behavioral effects have only a tiny effect on pre-transfer poverty and, a fortiori, on poverty impacts of the programs. However, the small size of these impacts is largely a result of the small reciprocity rates for these programs in the entire U.S. population, for generally these rates are quite small and below 10 percent or even below 5 percent (the two exceptions are OASI and Medicare, for which 23 percent of all U.S. families are recipients). Consequently, while these calculations answer the question of how important behavioral impacts are to the aggregate poverty-reducing impact of the U.S. benefit system—basically, zero—it does not answer a different and also interesting question: how important are behavioral responses to the poverty-reducing impact of the system on the recipient population alone? Table 9 provides the answer to that question and shows larger impacts. For example, for the SSI program, while a no-behavioral-impact analysis would imply that the program reduces the poverty rate of its recipients from 80 percent to 72 percent, we estimate that the true reduction would be from 79 percent to 72 percent since the pre-transfer poverty rate of SSI recipients would be 1 percentage point lower in the absence of the program. Thus, the poverty-reducing impact of the program is about seven-eighths of what it might otherwise have been thought to be.

The estimates for the other programs in the table usually show smaller impacts than for SSI. The poverty-reducing impact of the TANF program is very little affected by behavioral response.<sup>28</sup> Further, while the five social insurance programs increase pre-transfer poverty by as

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<sup>28</sup> It is unclear whether this small impact is consistent with the impact of 1996 welfare reform on poverty. That reform did force many women off TANF altogether. While the experimental evidence suggests that the types of reforms actually enacted had little effect on poverty, the nonexperimental evidence indicates a larger effect (Grogger and Karoly, 2005, Chapter 7). One possible difference is that the reform may have pushed off the rolls those recipients with greater earnings capability, whereas our estimates are intended to pertain to the entire caseload, which should be expected to include women with lower potential incomes off welfare.

much as 2 or 3 percentage points, this increase is trivial relative to the impact of the programs on post-transfer poverty. This is a reflection of the generally low employment rates of the populations served by these programs even in the programs' absence. The program with the largest relative behavioral impact is housing, where the estimate of the true impact of the program on the poverty rate is about half what the no-behavioral-effect estimates imply. The housing programs have a large number of working recipients, whose earnings effects are estimated by Jacob and Ludwig (forthcoming) to be non-trivial.

The other columns of the table shed further light on the influence of behavioral effects. They show that the influence of behavioral effects is much less for those in deep poverty and much more for those in near-poverty, especially for the means-tested programs. Taking into account behavioral response has only a small influence on the impact of those programs on deep poverty even for housing programs, where the impact on deep poverty is 84 percent of the no-behavioral-effect estimates. These results arise from the relatively low earnings and employment rates of the very poor population, even in the absence of the programs. On the other hand, the relatively high earnings and employment rates of those higher up in the income distribution result in greater behavioral effects. While the impact is still modest in size for the SSI and TANF programs, the impact of housing programs on the percent of recipient families below 150 percent of the poverty line is only about one-fifth of the no-behavioral-effect estimate.

#### **Section 4: Summary and Conclusions**

Our review of the impact of the U.S. benefit system on poverty has revealed several important facts. First, the combination of the means-tested and social insurance transfers in the

system have a major impact on poverty, reducing deep poverty, poverty, and near-poverty rates by about 14 percentage points in the U.S. population as a whole in 2004. Second, this impact is only negligibly affected by work incentives which, in the aggregate, have almost no effect on the pre-transfer rates of poverty in the population as a whole. Third, the impact is still important when improved measures of the poverty line, such as those suggested by the National Academy of Sciences, are used. While overall rates of poverty are considerably higher when using those measures than when using others we examine, the amount by which poverty is reduced is approximately the same, save for a slightly greater reduction of deep poverty for the NAS measure.

When we examine the source of this poverty-reducing impact of the system, however, we find that the largest impact arises from the OASI program. The elderly had pre-transfer poverty rates of 55 percent in 2004. OASI reduces poverty dramatically and reduces deep poverty and the poverty gap among the elderly almost to zero. The DI program also has a major impact through its effect on reducing high deep poverty rates almost to zero among the disabled. The SSI, TANF, Food Stamp, EITC, and housing assistance programs all have significant, though smaller, impacts as well. Their effects are often targeted on specific groups; for example, poverty rates among single-parent families are significantly reduced by the system.

We find that the demographic group which is most underserved by the system are non-elderly, non-disabled families with no continuously-employed members. While such families are eligible for some means-transfers such as TANF, Food Stamps, and housing (although reciprocity rates often low), they are generally ineligible for other benefits if they are childless and, obviously, they are ineligible for the significant benefits from the EITC. Their poverty rates

are over 80 percent before transfers and 67 percent after transfers, by far the highest of any of the demographic groups we examine.

When we examine trends in the benefit system over the twenty years prior to 2004, we find that the overall contours of the system are unchanged and that the benefit system has continued to have a large impact on poverty. However, we also find major shifts in the distribution of transfers within and across demographic groups. Within single-parent and two-parent families, as well as those with nonemployed members, we find a notable shift in transfers away from those in deep poverty toward those at higher income levels, both below and above poverty. These trends reflect primarily the rise of the EITC and decline of AFDC/TANF and Food Stamps for the very poor, which is a regressive combination. We find that the post-transfer deep poverty rates for these groups have actually risen over time as a result. Across groups, we find a notable shift in expenditures toward the elderly and disabled and away from other groups. These expenditure shifts are reflected in our calculations of program poverty impacts. In 1984, programs reduced poverty much more among single parent families and the nonemployed than they did in 2004. Programs in 2004 have larger effects on the higher income groups than they did in 1984.

We note several characteristics of the U.S. benefit system which other studies have similarly noted. First, the U.S. system favors groups with special needs, such as the disabled and the elderly. Groups like these which are perceived as especially deserving receive disproportionate transfers and those transfers have been increasing over time. Second, the system favors workers over nonworkers and has increasingly done so over time. The rise of the EITC and the decline of AFDC/TANF is most illustrative of this trend. Third, the system has a preference for in-kind transfers for food, medical care, and housing over pure cash transfers.



This preference has increased over time. Aside from the TANF program, which has shrunk though it still has an impact on single-parent families, all other cash programs in the U.S. have a specially favored group (the disabled, workers, etc.) as their recipients.

The result of these preferences is that the U.S. system differs dramatically from the universalist ideal envisioned by promoters of the negative income tax and others proposing similar systems. This ideal would provide cash benefits only on the basis of income and not on the basis of any other characteristic, and would therefore serve all poor families in similar economic circumstances equally. It would provide for all their consumption needs, not just a subset of them.<sup>29</sup> Instead, the U.S. public appears to be paternalistic, preferring to impose its own consumption preferences on the poor, and appears to be heavily influenced by perceptions of deservingness (see Bane (2009) for a recent review of poll evidence). It also appears to prefer to subsidize the low-income employed and to disfavor providing subsidies to nonemployed men or to women to remain at home with their children. The latter preference may arise from the increasing labor force attachment of middle class women and consequent changes in expectations about whether women should work.

There are many avenues for future research. One is to further explore one of our key findings, the redistribution of expenditures for certain demographic groups from the poorest households toward those with greater incomes. The exact programs which have resulted in this and the reasons for that redistribution, as well as whether it has occurred in years other than the three we examine, deserve further investigation. Another major issue is the appropriate

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<sup>29</sup> A possible rationale for the low coverage of some groups, like non-disabled childless families and individuals, is that their labor supply elasticities are sufficiently high that the public prefers to provide them with few transfers if they do not work. The optimal tax model in economics would predict this outcome. Indeed, studies from the negative income tax experiments showed major labor supply reductions among two-parent families from an unrestricted program (Burtless, 1987). However, the optimal tax model has little to say about most of the trends we note here, since they mostly concern distributional weights that the public assigns to different groups.

valuation of Medicare and Medicaid. These programs are the largest and fastest-growing for the low-income population and are beginning to exercise a dominant influence on public budgets. Yet there has been inadequate work on the key issue of how to assign a market value to these benefits, as well as the more traditional issue of how recipients value them relative to cash. A final issue is that, despite the very large volume of research on the behavioral disincentive effects of transfer programs, our review revealed large lacunae in the literature which made it impossible for us to estimate their effects on family incomes, poverty, and other behaviors. These and other topics constitute stimulating areas for further work.

## Appendix A

### Construction of NAS Poverty Measures FCSU and FSCUM

#### Thresholds

Both the FCSU and FSCUM thresholds are based on out-of-pocket expenditures, as calculated by the Census Bureau using data from the Consumer Expenditure Survey. The first threshold is based on out-of-pocket expenditures on Food, Shelter, Clothing, and Utilities (FCSU) and the second threshold is based on out-of-pocket expenditures on Food, Shelter, Clothing, Utilities, and Medical-out-of-pocket expenses (FCSUM). Both thresholds include repayment of mortgage principal for owned housing. The FCSU reference family threshold for a family of two adults and two children in 2004 is \$21,895 and the FCSUM reference family threshold is \$23,738.<sup>30</sup>

These reference family thresholds are adjusted for family size and composition using a three-parameter scale that differentiates between single-parent families and two-parent families. For the FCSUM, only the non-medical part is adjusted. The three-parameter scale is shown below (Garner and Short 2008):

1. One and two adults:  $scale = (adults)^{0.5}$
2. Single parent:  $scale = (adults + 0.8*firstchild + 0.5*other\ children)^{0.7}$
3. All other families:  $scale = (adults + 0.5*children)^{0.7}$

The medical part of the FCSUM threshold is further adjusted for family characteristics associated with variations in medical-out-of-pocket expenses (MOOP). In 2004, MOOP was

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<sup>30</sup> See Garner and Short (2008) for a detailed description on the construction of these thresholds.

estimated to represent 7.4 percent of the FCSUM reference threshold.<sup>31</sup> This portion of the FSCUM reference family threshold is multiplied by the relevant risk factor for family type and added to the non-medical portion of the FCSUM threshold for each family (Short 2001).<sup>32</sup>

## **Resources and Deductions**

Pre-transfer resources are defined as in the updated Scholz et al. measure used in this paper. They include the sum of earnings and non-transfer nonlabor income minus income and payroll taxes. Federal and state income taxes were computed from the NBER TAXSIM program (Feenberg, 1993) and payroll taxes were directly calculated using official tax rates. In the computation of income taxes, the EITC and the child tax credit were excluded since those credits were counted as transfers.

Child care and other work-related expenses are subtracted from resources in both the FCSU and FCSUM poverty measures. MOOP, however, is only subtracted from resources in the FCSU measure, since the FCSUM measure accounts for MOOP in the threshold. For child care and other work-related expenses, we follow the methods described in Short (2001).<sup>33</sup>

Below are median weekly amounts for child care expenses in 2004, depending on the age composition of children under 12 in the family:

### 1. One Child under 12 years

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<sup>31</sup> Authors' Personal communication with Kathleen Short.

<sup>32</sup> See Table A-10 in Short (2001) for family risk factors. Details on how family health and insurance status were imputed are available from the authors upon request.

<sup>33</sup> Median expenses listed below were obtained in personal communication with Kathleen Short.

- a. None under 5 years                      \$52
  - b. One under 5 years                        \$96
2. Two or more children under 12
- a. None under 5 years                      \$57
  - b. One under 5 years                        \$104
  - c. Two or more under 5 years            \$104

Median weekly expenses are multiplied by .85 and then by the number of weeks worked by the parent who works the least. If one parent does not work at all, no child expenses are deducted. In addition, expenses are capped by the earnings of the lower earning parent.

The median weekly amount for work related expenses for 2004 is \$23.19. This amount is also multiplied by .85 and by the number of weeks worked for anyone in the family who worked. In addition, expenses are capped by that person's earnings.

For MOOP expenses, we use information from the medical expenses topical module administered in Wave 3 of the 2004 SIPP. Specifically, MOOP is the amount of money spent on medical care, including health insurance premiums and excluding reimbursements.<sup>34</sup>

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<sup>34</sup> Details on how MOOP was imputed for missing observations are available from the authors upon request.

## **Appendix B**

### Calculations of Pre-Transfer Earnings

SSI. For SSI recipient families with heads over 65, the SSI estimates for the elderly are used. Those estimates imply that male earnings should be increased by \$2,375 dollars for men and decreased by \$1,425 for women (1996 dollars; in 2007 dollars, the figures are \$3,139 and \$1,883, respectively). Since we do not know who in the family is the recipient, we apply the male figure to family earnings if the head is male, and the female figure to family earnings if the head is female. We increase or decrease family earnings by that amount. To account for corresponding changes in positive tax payments, we ratio tax payments up or down using the average tax rate for the family at their initial, observed point. For SSI recipient families with heads under 65, we apply the figures for work disincentives for the SSI disabled. We increase family earnings by \$2,203 (2006 dollars; \$2,266 in 2007 dollars). We adjust positive tax payments in the same way as previously described for the elderly.

TANF. The family earnings of each family receiving TANF was increased by 20 percent of its TANF benefit. A tax adjustment was made in the usual way.

Housing Assistance. For families receiving housing assistance and who had earnings, earnings are increased by 11 percent and taxes adjusted according. To generate an increase in the employment rate of 4 percentage points, every tenth nonworking family receiving housing assistance was randomly selected and was given the mean earnings and taxes of working recipient families (after the 11 percent increase). Since 44 percent of recipient families did not

have earnings, moving one-tenth of them to working status increases the employment rate by 4 percentage points.

OASI. As noted in the text, we assume that the program reduces the employment rate of men by 15 percentage points at age 62 and that this disincentive declines linearly to zero by age 70. We therefore first calculate the percentage-point reduction at each age. Then we calculate the rate of nonemployment at each age, 62 to 70, and then determine what fraction of these nonworkers would have to be changed to workers to generate the afore-calculated increases in the employment rate. For example, at age 62, 32.3 percent of men do not work, so moving a little less than half of them to working status would increase the employment rate of men age 62 by 15 percentage points. After calculating these fractions for each age, we randomly select nonworking men at each age and move them to working status. We then assign them the mean earnings (\$4,991 per month in 2007 dollars) and taxes of working males in the 55-60 age group in the data, a proxy for pre-retirement earnings.

Disability Insurance. For all families receiving DI, we change their earnings exactly as described above for under-65 SSI recipient families.

Medicare. For all families over 65, we apply a procedure analogous to that used for the OASI program. Using age-specific reductions in the employment rate induced by Medicare for men at each individual age from 62 to 71 provided to us by French and Jones, we again randomly select from the nonworkers and change them to workers at a rate necessary to generate the desired increase in the employment rate. Then the earnings and taxes of working men 55-60 are again assigned to these families.

Unemployment Compensation. Using the estimated annual earnings disincentive of \$3,585 (1990 dollars, translated to \$5,687 in 2007 dollars), we increase the earnings of all

families who received benefits during the year by this amount, and make the usual tax adjustment.

Workers Compensation. We conduct the exact same procedure as for Unemployment Compensation, but reduce the disincentive amount by 25 percent.



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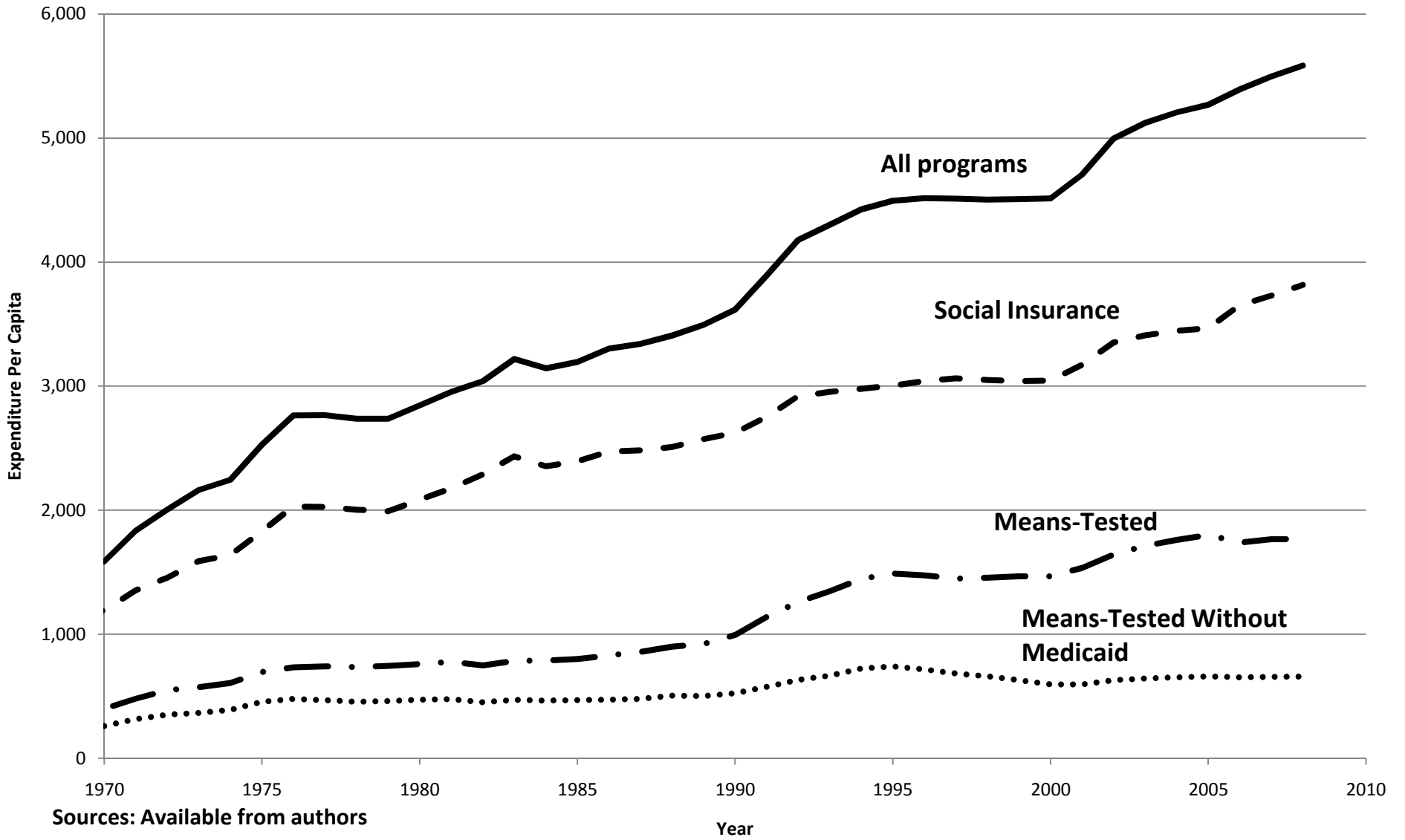
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# Figure 1: Annual Expenditure Per Capita, 1970-2008

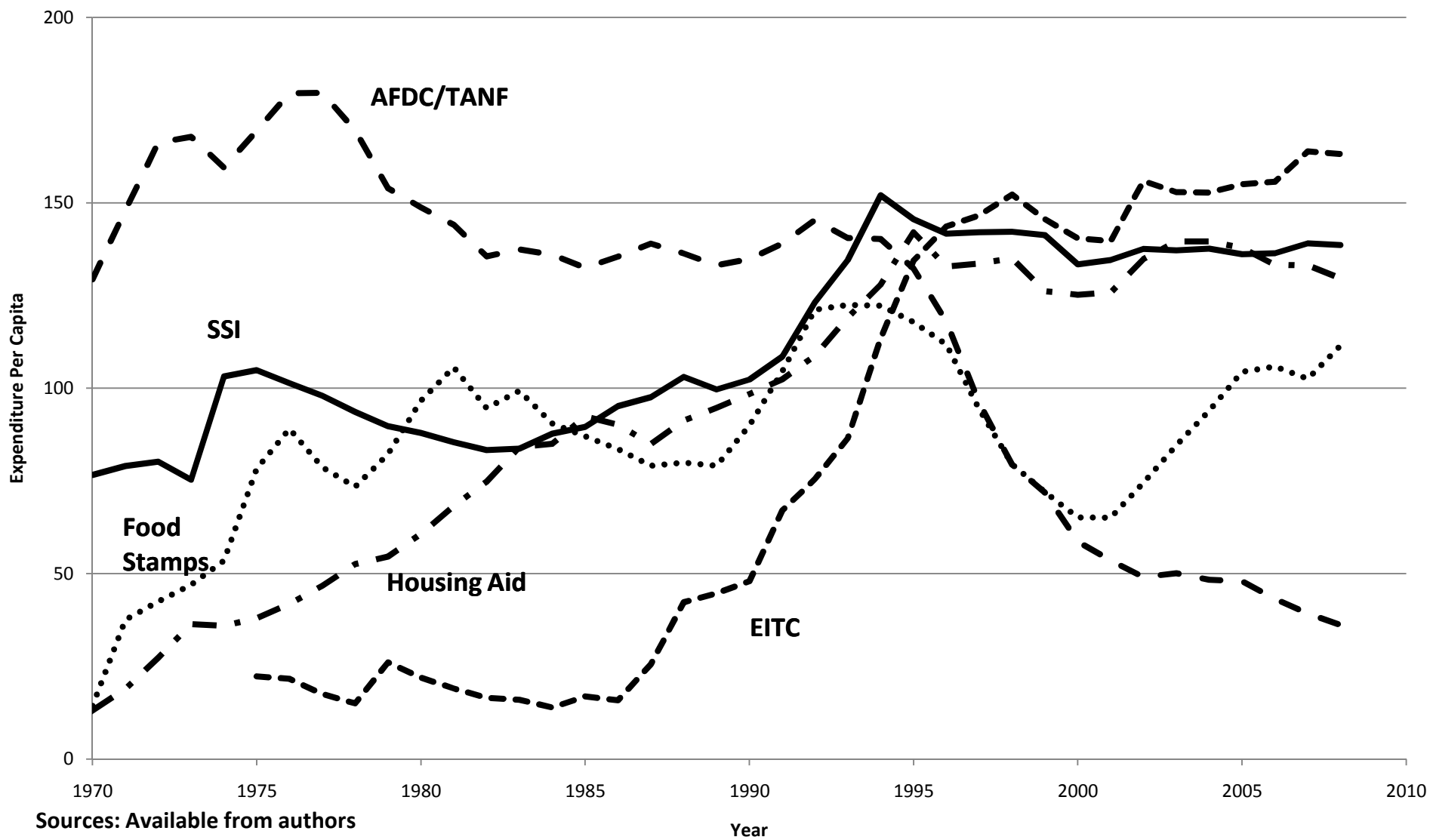
(Constant 2007 Dollars)



Sources: Available from authors

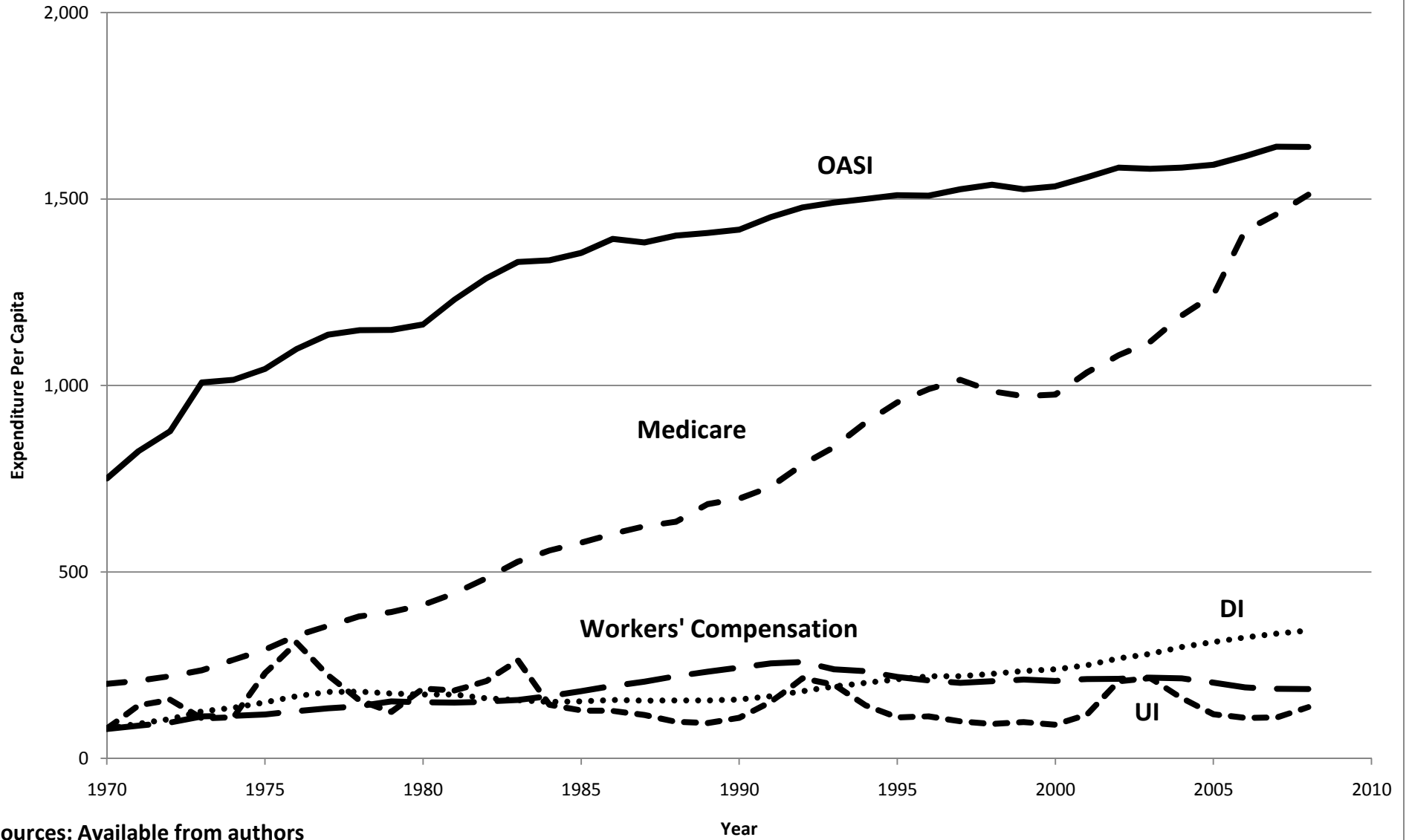
**Figure 2: Annual Expenditure Per Capita, Non-Medicaid Means-Tested Programs, 1970-2008**

(Constant 2007 Dollars)



**Figure 3: Annual Expenditure Per Capita, Social Insurance, 1970-2008**

(Constant 2007 Dollars)



Sources: Available from authors



Table 1: Annual Expenditures and Caseloads in Social Insurance and Means-tested Programs, FY 2007

	Type of Transfer	Demographic Groups Covered	Expenditures (constant 2007 dollars, millions) <sup>1</sup>	Caseloads <sup>2</sup> (thousands)	Monthly Expenditures per Recipient <sup>3</sup>
<b>Means Tested Programs</b>					
Medicaid	In-Kind	Families with dependent children, disabled, elderly	328,875	56,821	482
SSI	Cash	Aged, blind, and disabled individuals and families	41,205	7,360	467
AFDC/TANF	Cash	Mostly single mother families	11,624	4,138	234
EITC	Cash	Individuals with positive earnings	48,540	24,584	165
SNAP	In-Kind	All individuals and families	30,373	26,316	96
Housing Aid	In-Kind	All individuals and families	39,436	5,087	646
School Food Programs	In-Kind	Children in school	10,916	40,720	22
WIC	In-Kind	Mother, infants, and children at nutritional risk	5,409	8,285	54
Head Start	In-Kind	All children	6,889	908	632
<b>Social Insurance Programs</b>					
OASI	Cash	Elderly 62 and over	485,881	40,945	989
Medicare	In-Kind	Elderly 65 and over and some SSDI recipients	432,169	44,010	818
UI	Cash	Unemployed individuals with sufficient earnings and employment histories	32,454	7,642	354
WC	Cash	Disabled individuals with qualifying work histories	55,217	NA <sup>4</sup>	NA <sup>4</sup>
DI	Cash	Disabled individuals with qualifying work histories	99,086	8,920	926

<sup>1</sup>Expenditures include benefits and some non-benefit costs for Medicaid, AFDC/TANF, Housing, School Food Programs, WIC, Head Start, Medicare, and UI. For all other programs, expenditures are for benefits only.

<sup>2</sup>Caseload is unduplicated number of individual recipients, apart from the following programs:

AFDC/TANF: Average monthly number of recipients.

EITC: Total number of recipient families.

SNAP: Average monthly number of recipients.

Housing Aid: Total number of households receiving direct housing assistance (unduplicated for renters receiving more than one subsidy).

School Food Programs: Average monthly number of breakfast and lunch recipients, based on 9-month average (includes duplicates and full price meals).

<sup>3</sup>Expenditures divided by 12 divided by caseloads

<sup>4</sup>NA = not available

Sources: available upon request from the authors.

Table 2: Average Monthly Expenditures per Family (excluding Medicare and Medicaid) for Different Family Types, 1984, 1993, and 2004 SIPP

	1984	1993	2004
<b>Nonelderly, nondisabled</b>			
Single-parent families	624	623	501
Two-parent families	199	224	322
Childless families and individuals	143	164	153
Employed families	130	156	210
Nonemployed families	693	718	544
<b>Elderly families and individuals</b>	1,177	1,304	1,324
<b>Disabled families and individuals</b>	1,247	1,305	1,445

Source: Authors' calculations from wave 1 of the 1984, 1993, and 2004 SIPP.

Notes: Elderly families and individuals are those families and unrelated individuals headed by an individual age 65 or older. Disabled families and individuals are those with anyone in the family who received SSI or DI, and this category has a small overlap with the disabled. The Nonelderly, nondisabled families and individuals are mutually exclusive from the Elderly and Disabled, however. Single-parent families are families with children under 18 in the household and with one parent present, while two-parent families are families with children under 18 in the household and two married parents present. Childless families and individuals are those without a child under 18 in the household, and include what Census definitions call unrelated individuals as well as families. Employed families are those with at least one person over 15 who worked in all four months prior to interview. Nonemployed families are those without any such person. The single-parent, two-parent, and childless groups overlap with the employed and nonemployed groups; they are not mutually exclusive.

Table 3: Pre- and Post-Transfers Income Distributions (excluding Medicare and Medicaid), 1984, 1993, and 2004

	Pre-Transfer				Post-Transfer			
	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line
2004	29.0	28,334	21.3	39.6	13.5	9,690	6.6	25.3
1993	30.3	25,303	20.8	43.7	13.1	6,530	4.5	29.4
1984	32.1	21,339	20.4	49.7	15.3	6,105	4.5	36.3

Source: Authors' calculations from the 1984, 1993, and 2004 SIPP (waves 1). Dollar amounts are in 2007 dollars, using the CPI-U.

Table 4: Pre- and Post-Transfers Income Distributions under Different Poverty Measures (excluding Medicare and Medicaid), 2004

	Pre-Transfer				Post-Transfer			
	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line
2004 Scholz et al. Measure	29.0	28,334	21.3	39.6	13.5	9,690	6.6	25.3
2004 Scholz et al. Measure Minus NAS Expenses <sup>a</sup>	33.8	33,451	24.7	46.2	16.5	11,572	7.7	31.7
2004 NAS FCSU <sup>b</sup>	37.4	40,924	25.9	51.1	20.0	14,923	8.5	39.0
2004 NAS FCSUM <sup>c</sup>	37.2	43,134	24.8	51.9	21.0	16,248	8.4	41.3

Source: Authors' calculations from the 2004 SIPP (waves 1). Dollar amounts are in 2007 dollars, using the CPI-U.

<sup>a</sup>Childcare, work-related expenses, and medical out-of-pocket (MOOP) expenses subtracted from income.

<sup>b</sup>Poverty threshold based on out-of-pocket expenditures on Food, Shelter, Clothing, and Utilities (FCSU) (including repayment of mortgage principal for owned housing).  
Childcare, work-related, and MOOP expenses are subtracted from resources.

<sup>c</sup>Poverty threshold based on out-of-pocket expenditures on Food, Shelter, Clothing, Utilities, and MOOP (FCSUM) (including repayment of mortgage principal for owned housing). Childcare and work-related expenses are subtracted from resources.

Table 5: Effect of Transfers on Poverty based on Scholz et al. Poverty Measures, 2004 SIPP – All Families and Individuals

	Post-Transfer			
	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line
<b>Means-tested transfers</b>				
Medicaid	25.2	18,992	14.7	35.3
SSI	28.6	25,962	19.5	39.3
TANF	28.9	27,617	21.0	39.6
EITC	28.1	27,479	20.9	38.6
Child tax credit	28.9	28,288	21.3	38.9
General Assistance	29.0	28,289	21.3	39.6
Other welfare	29.0	28,270	21.3	39.6
Foster child payments	29.0	28,328	21.3	39.6
Food stamps	28.6	26,590	20.8	39.4
Housing Assistance	28.4	26,340	19.7	39.3
WIC	28.9	28,123	21.3	39.5
<b>Social Insurance</b>				
Social Security (OASI)	21.0	20,129	13.8	32.3
Disability Insurance	27.2	24,824	18.5	38.4
Medicare	19.9	18,115	12.0	32.7
Unemployment Comp	28.1	26,417	20.2	39.0
Workers Comp	28.7	27,992	21.1	39.3
Veterans Benefits	28.6	27,821	20.9	39.3

Source: Authors' calculations from wave 1 of the 2004 SIPP. Dollar amounts are in 2007 dollars, using the CPI-U.

Table 6: Effect of Transfers on Poverty based on Scholz et al. Poverty Measures, 2004 and 1984 SIPP – By Family Types

	Pre-Transfer				Post-Transfer			
	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line
<b>2004</b>								
<b>Nonelderly, nondisabled</b>								
Single-parent families	36.9	3,580	25.3	53.4	21.9	1,642	11.8	36.8
Two-parent families	10.0	2,725	5.4	20.6	5.9	1,373	2.9	13.3
Childless families and individuals	19.5	7,615	13.6	29.2	16.3	5,558	10.1	26.0
Employed families	13.7	8,053	7.3	24.8	9.7	4,850	4.7	19.4
Nonemployed families	80.7	5,866	77.4	85.1	66.9	3,723	52.5	76.9
<b>Elderly families and individuals</b>	55.1	8,824	42.3	66.2	9.3	587	1.5	25.4
<b>Disabled families and individuals</b>	71.9	7,485	62.3	80.1	19.1	638	1.8	43.4
<b>1984</b>								
<b>Nonelderly, nondisabled</b>								
Single-parent families	58.5	3,689	38.2	82.3	33.3	1,033	7.9	71.1
Two-parent families	16.8	3,289	6.1	42.0	10.2	1,348	2.2	37.2
Childless families and individuals	20.3	4,341	10.9	34.6	16.2	2,933	7.3	30.2
Employed families	13.6	4,013	3.5	34.3	9.5	2,283	2.1	30.3
Nonemployed families	78.9	7,305	63.5	87.4	54.5	3,031	27.3	75.1
<b>Elderly families and individuals</b>	59.9	7,142	44.9	72.7	12.1	492	1.2	32.7
<b>Disabled families and individuals</b>	74.0	4,580	63.3	84.2	23.6	406	1.3	51.3

Source: Authors' calculations from wave 1 of the 2004 and 1984 SIPP. Dollar amounts are in 2007 dollars, using the CPI-U.

Notes: Medicare and Medicaid excluded. For definitions of family types, see notes to Table 2.

Table 7: Average Monthly Expenditure per Family by Income Level and Family Type, 1984 and 2004 SIPP

Income Level	Under 50% of Poverty Line		50%-100% of Poverty Line		100% - 150% of Poverty Line	
Year	1984	2004	1984	2004	1984	2004
<b>Nonelderly, nondisabled</b>						
Single-parent families	1,231	766	448	832	192	563
Two-parent families	1,118	814	509	872	197	539
Childless families and individuals	346	300	260	291	189	197
Employed families	516	426	350	493	175	338
Nonemployed families	833	495	497	1,052	470	678
<b>Elderly families and individuals</b>	1,106	1,254	1,264	1,388	1,255	1,386
<b>Disabled families and individuals</b>	1,333	1,447	1,292	1,590	1,063	1,534

Source: Authors' calculations from wave 1 of the 2004 and 1984 SIPP. Dollar amounts are in 2007 dollars, using the CPI-U.

Notes: Medicare and Medicaid excluded. For definitions of family types, see notes to Table 2.

Table 8: Pre-Transfer Poverty Measures After Adjustment for Work Disincentives, 2004 SIPP

	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line
<b>Means-tested transfers</b>				
SSI	28.91	27,758	21.18	39.52
TANF	28.99	28,199	21.29	39.60
Housing Assistance	28.73	28,014	21.06	39.35
<b>Social Insurance</b>				
Social Security (OASI)	28.88	28,223	21.22	39.46
Disability Insurance	28.84	27,464	21.13	39.48
Medicare	28.95	28,293	21.28	39.55
Unemployment Comp	28.96	27,982	21.22	39.60
Workers Comp	28.98	28,252	21.30	39.61

Source: Authors' calculations from wave 1 of the 2004 SIPP. Dollar amounts are in 2007 dollars, using the CPI-U.



Table 9: Pre-Transfer and Post-Transfer Poverty Measures with and without Work Disincentive Adjustment, Recipients Only, 2004 SIPP

	Pre-Transfer (No Behavioral Changes)				Pre-Transfer (Simulation of Behavioral Changes)				Post-Transfer			
	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line	Percent Poor (below the Poverty Line)	Poverty Gap (\$ million)	Percent of Families under 50% of the Poverty Line	Percent of Families under 150% of the Poverty Line
Means-tested transfers												
SSI	80.2	5,314	73.0	87.0	78.6	4,738	70.5	85.4	72.2	2,943	39.2	81.0
TANF	81.1	2,148	66.4	90.9	80.6	2,012	64.8	90.5	74.1	1,431	48.9	87.9
Housing Assistance	80.9	3,464	67.7	91.2	74.2	3,143	61.1	84.5	66.0	1,470	25.5	82.9
Social Insurance												
Social Security (OASI)	49.2	9,352	36.8	61.1	48.6	9,241	36.4	60.4	12.5	1,147	2.4	27.6
Disability Insurance	70.5	4,828	60.0	78.7	67.8	3,958	56.9	76.6	40.7	1,318	12.8	59.2
Medicare	54.2	10,978	41.6	65.3	54.0	10,936	41.5	65.0	14.0	757	0.4	34.7
Unemployment Comp	53.1	4,012	35.2	69.1	52.6	3,660	33.8	68.9	40.1	2,095	17.6	59.1
Workers Comp	53.9	353	42.3	64.3	51.5	270	40.1	63.7	4.6	10	0.7	12.1

Source: Authors' calculations from wave 1 of the 2004 SIPP. Dollar amounts are in 2007 dollars, using the CPI-U.