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INTRODUCTION

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Economics of Means-Tested Transfer Programs: Introduction  
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**ABSTRACT**

This volume collects a series of essays by prominent economists on each of the major means-tested, or welfare, programs in the United States: the Medicaid, Earned Income Tax Credit, Supplemental Nutrition Assistance, Temporary Assistance for Needy Families, Supplemental Security Income, Subsidized Housing, Training, and Early Education programs. Each essay covers the institutional history of a program, the policy issues surrounding it, its rules and regulations, its history of expenditure and caseloads, and, most importantly, a summary of the research that economists have conducted on the program and the findings from that research. The volume is an update of a popular first volume in 2003 which became a reference Handbook on the shelf of all economists and policy-makers who work on, or who are interested in, transfer programs in the United States. The new volume focuses primarily on the changes in programs which have occurred since 2003 and the results of new research since that date. The volume will be a timely contribution to on-going policy discussions in Washington and elsewhere, bringing the available evidence to bear on the many issues surrounding those programs.

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Issues concerning means-tested transfer programs in the U.S. continue to interest both researchers and policy-makers. Many of the programs have evolved significantly over the last decade and a half. While some programs that had previously declined, such as the Temporary Assistance to Needy Families (TANF) program, have remained at low levels of expenditure and caseloads, many other programs have grown. Those include the Medicaid program, the Supplemental Nutrition Assistance Program (SNAP), the Earned Income Tax Credit (EITC), and subsidized housing programs. On net, more programs have grown than have declined, leading to continued increases in per capita spending on means-tested programs as a whole. Further, the Great Recession saw major increases in caseloads and spending, partly the result of automatic growth occasioned by declines in income and consequent increases in the numbers of eligibles, but partly the result of programmatic reforms enacted by Congress and signed by the President. At this writing, most, but not all, of those programmatic expansions have phased out and the overall unemployment rate has returned to pre-recession levels, but whether caseloads and expenditures in the programs will decline to pre-recession levels remains to be seen.

Economic research on means-tested programs has mostly focused on the determinants of participation in those programs, the causes of trends in overall caseload and expenditure growth, the effects of program participation on work incentives and other behaviors, and their potential beneficial effects on the well-being of recipients as measured by reductions in poverty rates, increases in consumption, and positive effects on non-monetary outcomes such as health and education, and other outcomes. The long-term trend increase in expenditures and caseloads as well as the Great Recession expansions have led to further study of the effects of the programs

on these outcomes.

The chapters in the volume are revised versions of papers presented at a conference sponsored by the Smith-Richardson Foundation and convened by the National Bureau of Economic Research (NBER) in Cambridge, Massachusetts on December 4-5, 2014. Each chapter surveys the history, policy issues, rules, caseloads, and research on one of the major programs in the U.S. safety net. In addition, two chapters cover, respectively, employment and training programs and early childhood education programs, which are more human-capital oriented than are traditional means-tested transfer programs. The chapters represent updated versions of similar papers on each program published in a prior volume (Moffitt, 2003). The goal of these chapters, like those in the earlier volume, is to provide in a single source both the institutional details of each program or set of programs of a given type, and a summary of research findings. The institutional details surrounding each program are intended to provide research economists with an introduction to the nature of each program, while the summary of research findings provides policy analysts as well as non-specialist researchers a convenient source of learning the results of the latest studies. The technical level is kept at the level of an advanced graduate student in economics and is therefore intended to enable students conducting dissertation work as well as older researchers to follow the methods used and how they should be interpreted. The chapters also present the current policy issues under discussion for each program, another useful source of information for researchers.

This introduction has two remaining sections. The first provides an overview of current caseloads and spending in the major programs, a presentation of recent trends in those levels, and a discussion of marginal tax rates from safety net programs as a whole. The second section furnishes a short summary of each of the chapters in the volumes.

## **Means-Tested Transfer Programs in 2007**

Table 1 lists the major means-tested transfer programs in 2007, the last year before the Great Recession, when the caseloads and expenditures had not yet been affected by that major economic event.<sup>1</sup> All the programs in the table are discussed in detail in the chapters in this volume. The Medicaid program, which provides free medical care to low-income adults and children, to the elderly and disabled, and for long-term care, was by far the largest program in both expenditures and caseloads, with \$328 billion in expenditures and 56 million recipients. The second largest program by expenditure was the Earned Income Tax Credit (EITC), which provides a tax credit to families and individuals with relatively low levels of earnings, costing \$48 billion in FY 2007. While not always thought of as a welfare program, the EITC meets the means-tested transfer definition by its restriction to those with earned income below specified levels. The Supplemental Security Income (SSI) program, which provides cash benefits to low-income aged, blind, and disabled individuals, spent \$41 billion in the same year, while almost as much, \$39 billion, was spent on subsidized housing programs, which provide housing vouchers to low-income families, subsidized rent in public housing projects, and support for construction of low-income housing. The Supplemental Nutrition Assistance Program (SNAP), formerly called Food Stamps, which provides an allotment of funds for food expenditure for low income families and individuals, cost \$30 billion in FY 2007 and hence ranked as the fifth largest

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<sup>1</sup> Means-tested programs are defined here as programs for which core eligibility requires sufficiently low income and/or assets. Many major transfer programs like Social Security, Unemployment Insurance, and even Social Security Disability Insurance are excluded. Although often current benefits among beneficiaries in those programs are based on current earnings, income, or hours of work, core eligibility is based on having sufficient work or earnings over some historical period. Social Insurance programs like these are not aimed at alleviating poverty per se but rather at providing insurance for workers against certain types of reductions in future

program in terms of expenditure. The Temporary Assistance to Needy Families (TANF) program, which provides cash assistance for general consumption to low income families (mostly single mothers and children) is the most well known program to many economists, given the amount of research that was conducted on it under its earlier name, the Aid to Families with Dependent Children (AFDC) program. However, because of contractionary reforms enacted in the 1990s, the program was only the seventh largest in the US by 2007, with only \$11 billion in expenditure—only a quarter of what was spent on the EITC, for example. The table also shows figures for School Food programs (subsidized breakfasts and lunches for children from low-income families), the Head Start program (providing early education and child care for children of low-income families), and the WIC program (providing nutritional assistance to mothers, infants, and children at nutritional risk). While almost \$11 billion was spent on School Food programs, only \$6.8 billion and \$5.4 billion were spent on Head Start and WIC, respectively.

The programs differ in whether they provide a high level of benefits to a relatively small number of families, or a low level of benefits to a relatively large number of families, as shown in the last two columns of Table 1. In the former category is SSI, for example, which intends to provide cash for all consumption needs of eligible families. In the latter category are SNAP and School Food programs, which provide only a modest benefit for food consumption only but which provide it to large numbers of adults and children. Medicaid, subsidized housing, and Head Start are quite expensive per recipient because the consumption goods they subsidize have relatively high prices, but the TANF program provides more modest benefits even though they are intended for all consumption needs. EITC benefits are also modest despite the large scale of the program.

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income.

While the mix of different programs in the U.S. shown in Table 1 may seem to be a rather crazy-quilt assortment of programs with different structures and recipient groups, rather than following from some single rational design for assistance for the poor of all types, it does reflect what are commonly regarded as voter preferences in the country. For example, most programs are in-kind in nature, providing subsidies for specific consumption goods like medical care, food consumption and nutritional assistance, housing, and early childhood education. When cash is provided, it is generally not provided universally to all low-income families, but only to those with specific characteristics, like workers (the EITC) or the aged and disabled (SSI). The only quasi-general cash program in the country is the TANF program, but it has shrunk dramatically, providing only a modest level of benefits and only to a restricted set of families, again presumably reflecting disfavor for giving a general cash transfer in return for low income per se. For example, no cash program exists for poor, nonelderly and nondisabled childless nonworkers, whether single individuals or married, and only in-kind benefits are provided to other nonworkers.

### **Trends in Expenditure**

Figures 1 and 2 shows trends in real per capita expenditure on means-tested programs from 1970 to 2012, both for multiple programs taken together (Figure 1) and for several of the individual major programs taken separately (Figure 2). Figure 1 shows both a series for the top 84 means-tested programs through 2004 (after which the series was discontinued) and a series for the 10 largest programs through the end year of 2012. Both figures show that there has been no decline in per capita spending but, instead, spending has monotonically grown, albeit at different rates in different time periods.

Five distinct periods are discernible. The first phase began in the 1960s (although not shown in the figure) and ran through the mid-1970s. In this classic period of expansion of the welfare state in the U.S., the AFDC program expanded and grew, the Food Stamp program was extended to the nation as a whole, the SSI program was created, and housing aid was expanded. The second phase ran from the mid-1970s to the late 1980s, when expenditures flattened out, with no growth. The flattening out was a result of growth in the Food Stamp and housing programs offset by declines in spending on AFDC and SSI. The third phase, running from the late 1980s to the mid-1990s, saw another large increase in spending, exceeding that in the early 1970s in some cases. The growth resulted from major expansions in the EITC and in the SSI and subsidized housing programs. The fourth phase ran from the mid-1990s to 2007, with some expansion in overall spending but relatively little on the top 10 programs. Spending on AFDC declined as it was changed to the TANF program, spending leveled off in the SSI program, housing programs, and the EITC, but a new Child Tax Credit (CTC) was introduced, pushing up spending. The Great Recession constitutes the fifth phase, where per capita spending on the 10 largest programs grew by 15 percent from 2007 to 2011, arising from increases in expenditure particularly in the recently-renamed SNAP program, the EITC, and SSI. The causes of the trends in expenditure for the different programs over the different periods are discussed in detail in the individual chapters in the volumes.

Both Figures 1 and 2 exclude Medicaid expenditure growth. Per capita real spending in that program grew by 216 percent in the twenty-year period from 1970 to 1990 but continued to grow by 166 percent from 1990 to 2010. This makes the growth in aggregate spending considerably larger than implied by Figure 1. The figures also exclude expenditure on human-capital programs like employment and training programs and like child care and other early



education programs. As discussed in the chapter on employment and training programs, Department of Labor funding for such programs, while very high in the 1970s from the provision of public service employment and other programs, today is quite small, even less than is spent on the TANF program, the smallest in Figure 2. There is no reliable calculation of total expenditures on all child care and early childhood education programs, either currently or historically, but the chapter on these programs in this volume reports total expenditure across Head Start, Early Head Start, the Child Care Development Fund, and IDEA grants that is slightly above that of TANF in 2013-2014. Clearly, expenditures on human-capital related programs are dwarfed by those on conventional means-tested programs.

Most, but not all, of the trends in expenditure have been driven by trends in the recipient caseload rather than in expenditures per recipient. The run-ups in EITC expenditure and in spending on SNAP, for example, are primarily caseload-driven. However, increases in subsidized housing expenditure have been partially driven by the cost of housing, for subsidized housing is not an entitlement program and available slots are limited, with consequent long waiting lists (see chapter by Collinson et al.). Moreover, while the Medicaid caseload has expanded because of expansions of eligibility, increases in medical care prices have been at least as important in driving up the cost of the program. The decline in AFDC/TANF spending has also been primarily a result of dramatic reductions in the number of recipients, although benefits per recipient have also fallen.

These trends further illustrate the characteristics of U.S. safety-net programs noted previously. Much of the expansion has occurred in in-kind programs, particularly Medicaid, food programs, and housing. Those programs providing cash assistance which have expanded are those targeted on specific groups (workers, the elderly and disabled). Cash assistance in the

one program which provided assistance for general consumption needs to nonworking families, even if only mainly to single mother families, declined dramatically.

Ben-Shalom et al. (2012, Tables 2, 7) have shown that this evolution of expansion and contraction of different programs has resulted in a change in the distribution of expenditure by demographic group and by level of private income. This should be expected given the differences in demographic groups served shown in Table 1, for the programs which have expanded and those which have contracted have served different types of families. They find that, from 1984 to 2004, monthly transfers going to single mother households declined by 19 percent and those going to nonemployed families declined by 21 percent, while transfers going to employed families, the elderly, and the disabled grew by 61 percent, 12 percent, and 15 percent, respectively, over the same period.<sup>2</sup> Single mother families with private income less than 50 percent of the poverty line saw a larger, 37, percent decline in transfer receipt, while single mother families as well as two-parent families with private income between 100 and 150 percent of the poverty line saw transfer increases of 93 percent.

### **Cumulative Marginal Tax Rates**

A traditional focus of much economic research on means-tested programs concerns the magnitude of marginal tax rates (MTRs) in those programs, which measure the rate at which benefits are reduced as earnings increase and are a gauge of work disincentives. The chapters in these volumes report the individual MTRs in each program but not what is called the “cumulative” MTR that arises when a family participates in more than one program. This section reports what is known on that issue.

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<sup>2</sup> Their figures include social transfers as well as means-tested benefits, but exclude

For individual programs, the chapter in this volume on the Medicaid program, which does not have copays for recipients, shows that it has a zero percent MTR until the point of income eligibility is reached, after which all benefits are lost. This creates a cliff in the benefit schedule and a notch in the budget constraint where the MTR exceeds 100 percent. The SNAP program has a nominal 30 percent MTR but is effectively 24 percent because of an earnings exclusion provision, while subsidized housing programs have an MTR of approximately 30 percent. The SSI program has a 50 percent MTR after an income exclusion is exceeded. But the EITC provides a subsidy in its lower range, which generates an MTR that can be as high as -45 percent, but when the subsidy is eventually phased out, the MTR has a maximum of 21 percent. Most programs allow payroll and income taxes to be deducted from income prior to application of the MTR, thereby reducing the impact of the two MTRs together.

Relatively few studies have been conducted which report cumulative MTRs. This is a difficult task because it depends on which programs a family participates in and it can vary markedly from state to state if the program has state-specific parameters. No comprehensive calculations have been made for all combinations of programs in which a family might participate in and for all states. However, Table 2 reports an illustration calculation of cumulative MTRs facing low income families in 2012 who participate only in SNAP yet also face federal and state income and payroll taxes, which means that the EITC and the CTC are implicitly included as well. Since these are some of the largest programs in the safety net, they provide some sense of cumulative MTRs. MTRs for each family vary depending on their level of earnings, whether all family members work, their level of taxable unearned income, the

presence and ages of any children, marital and filing status, and other characteristics. Table 2 reports the distribution of MTRs across all families in each earnings range, given that those MTRs vary by family. For the poorest families with earnings less than 50 percent of the poverty line, the median MTR is only 13 percent. Indeed, many families face negative MTRs because of the EITC and because they have larger numbers of children. The 90th percentile MTR for this low income group is 35 percent, which arises mainly from families without children who are on SNAP. However, as the table shows, MTRs rise with earnings, going to medians of 24 percent for those between 50 and 100 percent of the poverty line and up to 32 percent just above that line. While the 10th percentile MTRs remain modest, those taxpayers who are at the 90th percentile of taxpaying units face up to 61 percent MTRs. The higher MTRs for these relatively high earnings families is a direct consequence of the EITC and CTC, which must be phased out. When that occurs, MTRs can be high when added to other positive taxes and to SNAP MTRs. But the low MTRs at low earnings and the higher MTRs at higher levels of earnings go together, and one cannot have one without the other.<sup>3</sup>

The major omission from these MTRs is the Medicaid program which is the most common program received, along with SNAP, for families receiving benefits from two or more programs. Medicaid income thresholds vary by state and type of recipient family but, prior to the Affordable Care Act, thresholds were typically around 50 percent of the poverty or a little lower or higher. This implies that the MTRs shown in Table 2 are probably about right for families in the lowest earnings strata but MTRs at higher earnings levels, particularly between 50 and 100 percent of the poverty line, are considerably higher than shown. This reinforces the

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<sup>3</sup> The CBO study had some reports of how these rates differ by presence of children and marital status, showing that families with children typically face higher MTRs than those without children, and that the dispersion of MTRS is greatest for single mother families, who face both

conclusion reached in the previous paragraph that the current means-tested transfer system imposes quite low MTRs for most of the poorest families in the U.S. but considerably higher ones for the minority of families (16 percent of those below 250 percent of the poverty line) who receive benefits from multiple transfer programs.

While no time series of cumulative MTRs is available, there is little question that they have fallen significantly over time for at least two reasons. One is that most of the high cumulative MTRs calculated prior to the 1990s were a result of a 100 percent MTR in the AFDC program, and the AFDC program was the largest means-tested transfer program in the country after Medicaid at that time (see Figure 2). Further, AFDC recipients were categorically eligible for Food Stamps and Medicaid and were often enrolled in subsidized housing programs, increasing the cumulative MTR for millions of recipient families. After the program was reformed in the mid-1990s, most states reduced their MTRs far below 100 percent, as the chapter on that program in this volume describes. Further, the dramatic decline in the AFDC program and its successor, TANF, means that multiple program receipt of that program with others constitutes only a small fraction of those receiving benefits today. Indeed, in 2010, 62 percent of families with income less than 250 percent of the poverty line received no benefits at all and another 22 percent received benefits from only one program (U.S. Congressional Budget Office, 2012, Box 1). The remaining 16 percent received benefits from two or more, but virtually all of those families receive two benefits only, the vast majority receiving SNAP and Medicaid.<sup>4</sup>

The second development has been the expansion of the EITC which, at least in lower earnings ranges, provides a sizable subsidy which offsets most of the MTRs for families with

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higher 90<sup>th</sup>-percentile MTRs as well as lower 10<sup>th</sup>-percentile MTRs.

<sup>4</sup> Edelstein et al. (2014) report rates of multiple benefit receipt in the mid-2000s and also report that the most common form of multiple receipt is of SNAP and Medicaid.

children, leading to low cumulative MTRs for a large fraction of the low income population. The introduction of a second tax credit, the Child Tax Credit, in 1998, further reduces the MTR for low-income families by providing a non-refundable credit that could only be applied against existing tax liability, thereby providing a larger credit to those with higher levels of income for those with low incomes.

### **Summaries of the Chapters**

Each chapter in the two volumes fleshes out the details of the program in detail and provide a summary of the research on the determinants of participation and caseload growth as well as on the effects of program participation and programmatic reforms on behavioral outcomes.

Buchmueller, Ham, and Shore-Sheppard review the Medicaid program. They note, as did the chapter in the 2003 volume, that the program is really composed of four separate programs, covering low-income children and parents, the low-income disabled, those in nursing homes, and seniors in need of insurance coverage complementary to Medicare. They review the history of the program, which was begun in 1965 and which was, for almost 30 years, primarily provided to single parent families receiving AFDC cash assistance and the elderly and disabled receiving SSI, but was extended to low income children and pregnant women not receiving cash assistance starting in the 1980s. They also review in detail the many other incremental reforms of significant program features in the late 1980s and early 1990s, followed by a review of the effects of the 1996 welfare reform on the program. They then provide a status report on the current evolution of the program under the provisions of the Affordable Care Act. They also

review the history and evolution of the CHIP program.

The Medicaid program has been the subject of a great deal of additional research since the 2003 volume and more is in progress at this writing. Buchmueller, Ham, and Shore-Sheppard provide a thorough review of both the older and newer research. Their review of the more recent literature on the effects of Medicaid eligibility expansions on takeup of the program by adults and children as well as crowdout of private insurance shows somewhat smaller estimates than did the earlier literature. The authors also review the effect of Medicaid on the purchase of private long-term care insurance, an issue of significant interest in the literature. Their discussion of the research on the effects of eligibility expansions on access to care and health of children shows that the literature provides strong support for positive effects on both, although the magnitudes are not always certain and the impacts seem larger on children in lower income families. Impacts on adult access to care also appear positive, but effects on health itself are less conclusive. The authors also review the literature on the effects of Medicaid expansions, payment policies, reimbursement rates, and related policies on provider behavior and provision of care, finding a significant range of effects and estimated magnitudes. Their discussion of the recent literature on the effects of Medicaid on labor supply shows a very wide range of estimates, ranging from zero in some studies to significant negative effects in others. Impacts of Medicaid on household financial hardship appear positive, however. Finally, they review the literature on the effect of the Medicaid program and of various reforms and individual policies on family structure, finding that the effects are not very robust across studies.

Austin Nichols and Jesse Rothstein discuss the Earned Income Tax Credit (EITC) program, which provides a subsidy to families with positive earnings. The subsidy increases with earnings at low earnings levels but then is phased out as earnings rise, and eventually phases out

completely for families with annual earnings of roughly \$45,000 or higher (for those with two or more children). They review the familiar history of the program, which was enacted by Congress in 1975 but was made much more generous in later years. Unlike other means-tested transfer programs, the EITC is administered by the IRS and the take-up rate is very high. The authors also discuss the Child Tax Credit, which is somewhat similar in structure but covers a rather different (higher) income range. Updating the 2003 volume's discussion of the EITC, Nichols and Rothstein demonstrate the continued growth of program expenditures and recipients, discuss the expansion of the program during the Great Recession, and provide new evidence on the distribution of taxpayers over different regions of the EITC schedule and on the accuracy of EITC imputations in survey data.

In their review of the effects of the research on the effects of the EITC, the authors confirm prior findings of positive labor supply effects for single mothers, small negative effects for married women, and essentially no labor supply effects for men, but also discuss newer studies on those effects which provide more nuanced findings. They review new evidence on the importance of information and saliency in the take-up decision, the reasons that families seem to prefer lump sum refunds rather than collecting the credit in smaller increments over the year, the large impact of the program on reducing poverty rates, as well as notable positive effects of the EITC on adult and child health outcomes, child test scores and educational attainment. They also describe the incidence of the EITC in the labor market, including some findings which suggest that employers capture some of the program benefits through lower equilibrium wages. Finally, they discuss proposals for reform, including more generous support for childless workers and extensions to disabled workers, and they evaluate comparisons, common in policy discussions, between the EITC and the minimum wage.



Hoynes and Schanzenbach review U.S. food and nutrition programs, which include not only the well-known Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) but also the School Breakfast Program and the National School Lunch Program (each of which supports subsidized schools meals for children from low-income families), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which provides vouchers for particular nutritional foods as well as counseling, health screening, and referrals for low income infants, young children, and pregnant and postpartum women. SNAP is the broadest and, indeed, the only means-tested transfer program in the country which provides essentially open-ended and unrestricted benefits to individuals and families of all types, basing eligibility only on need and not on family structure, disability, or other characteristic. The most important changes in the program since the 2003 volume include reforms in the states in the 2000s intended to increase access to benefits, and a temporary increase in benefits during the Great Recession. As for recent reforms in the other programs in recent years, nutritional standards in both the School Breakfast Program and the National School Lunch Program have been modified, payment formulas have been altered to encourage high-poverty schools to adopt universally free meals for all students, and access to the School Breakfast Program has been expanded. The content of the food bundle provided to WIC recipients has been changed to reflect current dietary guidelines and promote consumption of fruits and vegetables. None of these reforms altered the basic structure of the programs, however.

In their literature review, the authors begin by presenting a stylized model for examining the economic impacts of the programs, in particular highlighting the range across the programs in their degree of “in-kind” versus cash structure. They then review the large volume of research on the programs and their effects on program participation, consumption, labor supply, health

and nutrition, focusing on recent research that has used strong research designs. They find the research to show that the recent changes in SNAP caseloads, for example, are primarily driven by the macroeconomy, although SNAP and welfare policies have also played a role. Hoynes and Schanzenbach also review recent research on the effect of the program on food consumption and spending, finding them to be increased by the program but that the effect is essentially equivalent to the effect of cash for inframarginal households. The effects of SNAP on reducing food insecurity are, however, more mixed, and overall with less statistically significant findings. Much recent literature has focused on health effects, finding generally positive impacts on child health but more mixed results for obesity among adult participants. Recent research on the effects of the program on labor supply (based on data from the program rollout in the 1970s prior to welfare reform and the expansion in the EITC) show no significant effects overall but significant negative effects for single mother households. Leveraging recent expansions in the School Breakfast Programs, there has been a significant volume of recent research showing sharp increases in program participation, but more limited impacts on breakfast consumption and dietary quality, and decidedly mixed impacts on student test scores. Research on the National School Lunch Program on food security and body weight is quite mixed, but in the absence of experiments or programmatic changes it has been challenging to credibly identify impacts. Hoynes and Schanzenbach also review the recent literature on the WIC program. The research provides consistent evidence that WIC leads to improvements in birth outcomes, but there is much less evidence about how the program affects child nutrition and health. More recently, several studies explore the supply side incentives generated by the program.

Ziliak reviews the Temporary Assistance for Needy Families (TANF) program, which was called the Aid to Families with Dependent Children (AFDC) program prior to 1996. He

includes a new summary of the history of the program and of the major reforms in 1996 which introduced work requirements and time limits, reduced marginal tax rates on earnings, and enacted other features, and he shows the dramatic decline in the caseload which followed. He reviews the later 2005 DRA law, which changed the work requirements in the program, and he discusses the temporary additional spending allocated by Congress during the Great Recession. He shows that the “child-only” caseload has strongly increased, for an increasing proportion of cases have no adults supported by the grant, and that there has been an increase in the fraction of funds spent on in-kind activities such as child care, transportation, and work supports rather than simple cash assistance.

In his review of research on the program, he concentrates on new research conducted since the 2003 volume but also summarizes some of the research begun just after 1996 for which it is now possible to draw firmer conclusions. He finds that the literature on the causes of the caseload decline after 1996, for example, now shows somewhat greater relative effects of welfare reform policies than the macroeconomy on caseloads, but that the effect of the latter has generally declined, perhaps because of the rise of child-only families. Ziliak finds research on this issue in the Great Recession to show that the caseload became, with that recession, increasingly less responsive to the economy. His review of the effects of specific policies shows that time limits were an important contributor to caseload decline but that the research has had difficulty fully separating the relative importance of the many components of the 1996 reforms. The large body of research on labor supply, he finds, shows that welfare reform had a positive effect on employment and hours worked of single mothers, as did a number of specific welfare-to-work experiments that were conducted. However, while the literature also shows positive effects on earnings, the declines in welfare benefits arising from leaving welfare often cancel out

the earnings increases, leaving income relatively unchanged (although the literature also shows considerable heterogeneity, with some families experiencing income increases and others, decreases). Especially in more recent years, in addition, a significant number of single-mother families appear to have been made worse off and to have higher deep poverty rates. Ziliak's review of research on the effects of TANF on other outcomes shows mixed results on savings and consumption, some negative effects of the 1996 reform on health insurance coverage because of loss of Medicaid, no consistent evidence of the effect of reform on family structure and fertility, and mixed results of the effect of the reform on children, with some but not all studies showing positive effects on young children and negative effects on adolescents.

Duggan, Kearney, and Rennane review the Supplemental Security Income (SSI) program, a federal program created in 1974 which provides cash and usually Medicaid benefits to low income individuals who are eligible for reasons of older age or disability. SSI covers three distinct populations: blind and disabled children, disabled non-elderly adults, and individuals over 65, regardless of disability status, who meet the financial criteria. Many states have supplemental SSI programs which provide additional benefits to those in federal law. The authors discuss the important literature on the determination of medical disability for adults and children and of continuing disability reviews, finding shifting definitions over time which appear to be partly responsible for rising caseloads, particularly for disabled children (the latter particularly affected by expansions in medical eligibility criteria following the 1990 *Zebley* Supreme Court decision). They show that since the beginning of the program, the fraction of elderly adults on SSI has declined by more than half while the fraction of disabled non-elderly adults and children on SSI has risen substantially, doubling for children and younger adults. In terms of qualifying diagnoses, the authors find that in 2013, 68 percent of the child SSI caseload,

and 57 percent of the adult caseload, had mental disorders, the rest having physical disorders.

In their review of research on SSI, the authors find that the program increases family income and reduces poverty rates and food insecurity but that the research provides mixed evidence of the effect of the child SSI program on parental labor supply and earnings. The authors also review recent research indicating that child SSI recipients who lose eligibility as an adult have subsequent very low earnings and high rates of poverty, and they review what is known for the reason for the disproportionate presence of boys in the child SSI caseload. They also review the small literature on the effect of interactions between TANF, CHIP, special education, and other programs on child SSI participation, finding that spillovers between programs likely result from financial incentives for beneficiaries and for state governments. The authors also review the sizable literature on the effects of demonstration programs over the last 20 years intended to increase work among SSI recipients, which often show little or no effect, leading to a very mixed set of results. Finally, the authors discuss many questions still to be answered in research on SSI, including the need for additional research on the long-term outcomes of child SSI recipients. In conclusion, the authors find the volume of research on the SSI program to be smaller than it should be given the importance of the program and the many important policy issues surrounding it.

Collinson, Ellen, and Ludwig discuss the many low-income housing programs in the U.S., composed of public housing, privately-owned subsidized housing, and tenant-based vouchers. The authors trace the history of initial but then declining support for public housing, the changing character of government subsidies for the construction of private housing for those with low and moderate incomes (especially the 1986 Low Income Housing Tax Credit, or LIHTC), and the evolution of the 1974 housing voucher program, which is the largest housing

subsidy program for low-income households. They also provide an extensive discussion of the justification for housing programs. Their review of caseloads in the programs reveals falling numbers of households in public housing and other developments subsidized by the U.S. Department of Housing and Urban Development, but rising numbers of those living in LIHTC developments and receiving housing vouchers. The authors also discuss the very small fraction of low income families in the U.S. who actually receive subsidized housing assistance and the existence of long waiting lists created by limits on the number of units and vouchers made available. They add a discussion of the tradeoffs in providing less assistance to more households compared to the current situation as well as a discussion of targeting and priorities given the supply constraints.

The authors review existing research on housing programs, first reviewing research showing that housing subsidies do, in fact, increase housing consumption and reduce overcrowding. They also find that the research literature shows that public housing and housing vouchers have favorable effects on housing affordability, reducing the fraction of income families spend on housing, although there is little research evidence to date on the effects of the LIHTC. Their review of the evidence on the effects of housing programs on residential mobility suggests that the programs reduce it, although the number of studies is quite small. The considerably larger body of evidence on whether housing programs lead to residential locations in neighborhoods with better characteristics shows only very small effects of that kind. In their review of the effects of housing programs on other outcomes, the authors find evidence that vouchers reduce labor supply. They find little evidence that public housing and vouchers, as typically administered, do much in terms of improving neighborhood quality for families or providing measurable benefits for children. When housing vouchers improve neighborhood

conditions for families, however, as in the MTO experiment, children appear to benefit substantially into adulthood.

Barnow and Smith review the wide variety of employment and training programs in the U.S., ranging from programs for skill development (vocational development) to job development (public employment) to employability development (personal attitudes and attributes needed for employment) to work experience programs (providing work experience per se). Some other programs, such as the labor exchange, are intended to match workers and jobs better or to provide counseling and assessment or information about the labor market. The authors review the long history of programs, starting in the Great Depression, but concentrate their discussion on the Workforce Investment Act (WIA) program enacted in 1998. WIA remains the primary federal employment and training program and it was reauthorized with some changes in July, 2014 as the Workforce Innovation and Opportunity Act (WIOA). WIA introduced many new features to the nation's training programs, greatly extending the presence of One-Stop centers where individuals could learn about and participate in a large range of program options at one time, providing new Individual Training Accounts which were essentially vouchers for individuals to use at different training providers, mandating a fixed sequence of activities (starting with core services, then intensive ones, then training; this mandated sequence was deemphasized over time and eliminated in the 2014 reauthorization), and improving the performance management system. Studies of the implementation of WIA have shown that the One-Stop systems have been successfully established and that the Individual Training Accounts have been very popular, but that the new performance management system had many difficult challenges and that training programs were not sufficiently engaging the local business community.

In their review of research on employment and training programs, Barnow and Smith first review the many different methodologies used to evaluate program effects as well as providing a discussion of data and measurement issues. Their review of research findings, concentrated on studies since the 2003 volume, indicates many estimates of positive earnings effects from the WIA program (generally interpreted as treatment effects on the treated), although often differing by gender, by whether the trainees were dislocated workers rather than other types of adults in need, and by whether the effects were long-lasting rather than fading out. Their review of research on the Job Corps shows that it, alone among programs providing training to youth, has positive and substantial effects on their labor market outcomes, although the benefits fade after about five years as the control groups catch up. It also easily passes a benefit-cost criterion from the point of view of the participants. Barnow and Smith also review the evidence on the effects of the Trade Adjustment Assistance program, which provides employment and training services to those displaced by international trade, finding the program to not have statistically or substantively significant impacts on long-run labor market outcomes of the participants. The authors also review the smaller literatures on evaluation of performance measures, determinants of participation in employment and training programs, and the matching of participants to services.

Elango, García, Heckman, and Hojman review early childhood education (ECE) programs. The authors identify four different federal funding streams for childcare: the funding for Head Start and Early Head Start, the Child Care Development Fund, and the Individuals with Disabilities Education Act grants. They consider a wide variety of ECE programs, including (i) means-tested demonstration programs; (ii) Head Start, the largest means-tested ECE program in the U.S.; (iii) non-means-tested programs that have universal coverage in a local population; and



(iv) different types of childcare. They consider four iconic demonstration programs implemented from 1962 to 1988: the Perry Preschool Project, the Carolina Abecedarian Project, the Early Training Project, and the Infant Health and Development Program. They argue that these programs have objectives and components that resemble modern high-quality ECE program, making the conclusions drawn from them relevant. The authors also devote considerable discussion to Head Start, noting that its criterion for eligibility (poverty in terms of income) is less stringent than the criteria used for most demonstration programs (usually based on an index of disadvantage). They also review universal programs, including statewide and citywide programs in the U.S. and two comprehensive evaluations of universal programs in Norway and Canada. The authors stress the difference between high-quality (center-based) and low-quality (informal, family-based) childcare.

Elango and coauthors conduct an extensive review of research findings on these programs. They frame their discussion using the modern theory of skill formation and set up a framework illustrating the alternative choices that parents face for their children. They first focus on the four iconic demonstration programs, all of which were experimentally evaluated and have long-term follow-ups available. They also present their own reanalysis of the primary data sources used in those evaluations. Their review of studies of the effectiveness of Head Start considers both experimental evaluations with short-term data and quasi-experimental evaluations with long-term data. They find that, with few exceptions, ECE programs strongly boost IQ in the short-run but the control group largely catches up at school entry. They argue that this catch-up in IQ does not imply that these programs are not effective, as demonstration programs have strong impacts on substantive later-life outcomes by boosting non-cognitive skills. The available cost-benefit analyses of the programs are also strongly favorable. The authors stress that these

positive results are obtained from populations of disadvantaged children. Then they conduct a detailed review of the most rigorous evaluations of the Head Start program (especially those addressing substitution bias, i.e., the availability of good substitutes for members of control groups). They report that, contrary to some claims, Head Start has significant positive effects on many short-term and long-term child outcomes. In a review of the evaluations of universal ECE programs, the authors find that these programs have heterogeneous impacts across children in different socioeconomic statuses, with effects ranging from strongly positive for very disadvantaged children to low or even negative for non-disadvantaged children. They conclude by presenting evidence in the U.S. indicating that impacts are inextricably tied to program quality and to the quality of alternative home environments.

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

	Type of Transfer	Demographic Groups Covered	Expenditures (millions)	Caseloads (thousands)	Monthly Expenditures per Recipient (constant 2007 dollars)
Medicaid	In-Kind	Families with dependent children, disabled, elderly	328,875	56,821	482
EITC	Cash	Individuals with positive earnings	48,540	24,584	165
SSI	Cash	Aged, blind, and disabled individuals	41,205	7,360	467
Housing Aid	In-Kind	All individuals and families	39,436	5,087	646
SNAP	In-Kind	All individuals and families	30,373	26,316	96
TANF	Cash	Mostly single mother families	11,624	4,138	234
School Food Programs	In-Kind	Children in school	10,916	40,720	22
Head Start	In-Kind	All children	6,889	908	632
WIC	In-Kind	Mother, infants, and children at nutritional risk	5,409	8,285	54

Source: Ben-Shalom et al. (2012, Table 1).

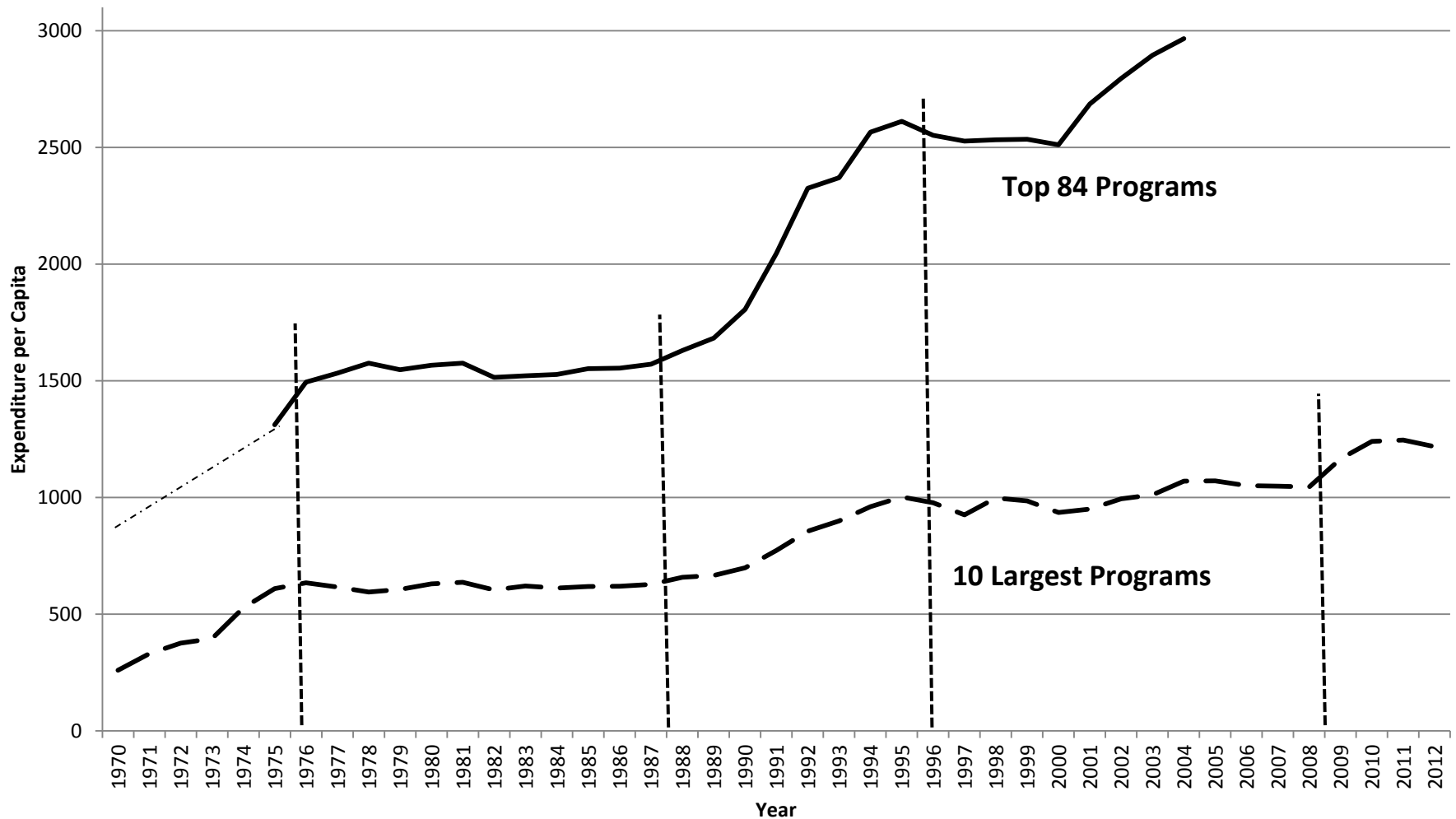
Table 2

Marginal Tax Rates Faced by U.S. Families with Income  
Below 200 Percent of the Poverty Line  
Participating in the SNAP Program  
under 2012 Law (percent)

Earnings Relative to the Poverty Line	Median	10th Percentile	90th Percentile
0 to 49 percent	13	-8	35
50 to 99 percent	24	13	53
100 to 149 percent	32	22	61
150 to 199 percent	31	22	51

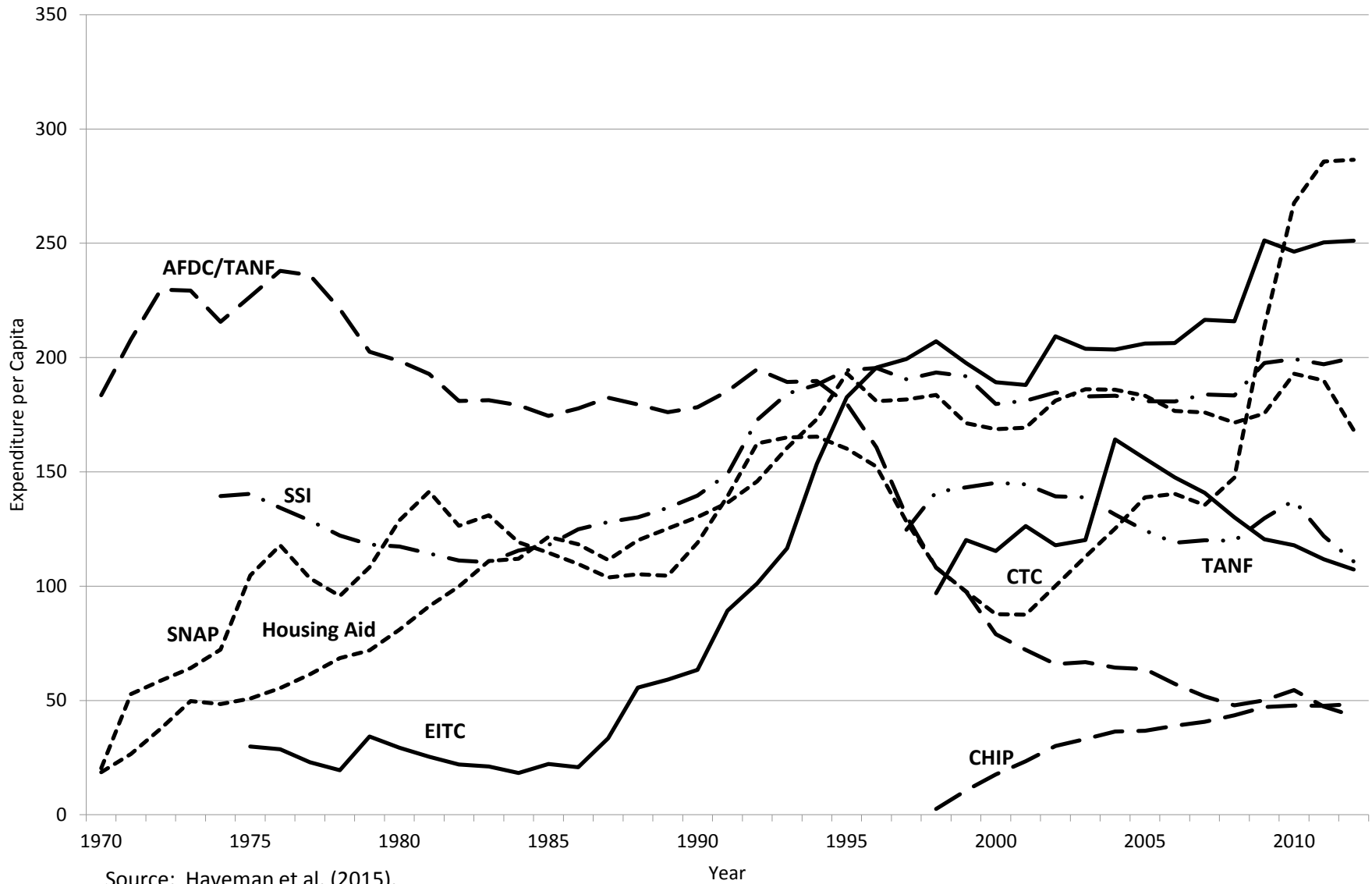
Source: U.S. Congressional Budget Office (2012, Figure 5). The simulation estimates the MTR for each filing unit in 2012, for those families with earnings in the specified earnings-to-poverty-line range, evaluated at the point at which their family earnings are observed. The MTRs are based on federal and state income taxes, federal payroll taxes, and the SNAP benefit formula. Only nonelderly, nondisabled families with positive family earnings are included.

**Figure 1: Real Expenditure Per Capita in Means-Tested Programs ,  
1970-2012 (Real 2009 Dollars)**



Notes: Top 84 programs from Spar (2006) and 10 Largest Programs from authors' calculations from individual program statistics. Expenditures are sum of federal, state, and local expenditures. The top 84 program figures for before 1975 are extrapolated between 1968 and 1975. Top 10 programs exclude Medicaid.

**Figure 2: Expenditure per Capita, Non-Medicaid Means Tested Programs, 1970-2012 (real 2009 dollars)**



Source: Haveman et al. (2015).