

TREASURY WORKING PAPER

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Why Welfare Caseloads Fluctuate: A review of research on AFDC, SSI, and the Food Stamps Program.

Susan E. Mayer

BACKGROUND

This paper reports United States research on the causes of caseload fluctuations in selected welfare programmes. It has been jointly commissioned and funded by Treasury and the Ministry of Social Policy. The paper is part of a wider project motivated by a need to get a better understanding of the causes of long term benefit trends in New Zealand.

The issue of welfare benefit trends is important, not only because of the fiscal implications, but also because it is closely related to concerns about poor outcomes, and social exclusion. Treasury has commissioned a companion piece on the United Kingdom research evidence from the Centre for Social Policy Research at Loughborough University. This is to be published later this year by the Policy Press at the University of Bristol. The results of these studies will be used to review the New Zealand evidence on the causes of long term trends in benefit numbers.

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ABSTRACT

This report reviews research on trends in the caseloads of three means-tested transfer programs in the United States: Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), and the Food Stamp Program (FSP).

Trends in caseloads are the result of 1) program parameters and interactions between programs, 2) economic conditions, 3) norms and values, and 4) demographic characteristics. Most research tries to estimate the relative importance of the first two. The research suggests that all else equal, as welfare programs become more generous and easier to get caseloads increase. Caseload changes are also greatest when two or more of these four factors provide similar incentives for people to alter their behavior. For example, recent declines in AFDC and the FSP caseloads appear to be the result of the combined effect of the strong U.S. economy and policy changes that made work more available and more attractive compared to welfare. Similarly, program interactions are important. When programs provide opposing incentives, they reduce the behavioral response to either incentive, and when programs provide similar incentives, the behavioral response is greater than if only one program provided the incentive. Finally, incentives do not affect everyone in the same way. Program changes that benefit some recipients may hurt others.

The research on caseloads has many limitations that reduce confidence in these estimated effects. The research is almost all based on reduced-form models, which tell us little about the causal mechanisms through which exogenous factors affect caseloads. The theory about these causal mechanisms is weak resulting in the possibility of mis-specification and many key variables are poorly measured or omitted.

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Why Welfare Caseloads Fluctuate:
A Review of Research on AFDC, SSI, and the Food Stamps Program

Submitted to
The New Zealand Ministry of Social Policy
and
The New Zealand Treasury

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Executive Summary

This report reviews research on the causes of fluctuations in the caseloads of the two main means-tested income transfer programs in the United States, Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (SSI). It also reviews research that tries to account for the decline in welfare caseloads after 1996 when AFDC was replaced with Temporary Assistance to Needy Families (TANF). Finally, it reviews research on trends in the Food Stamp Program (FSP) caseloads. The FSP is often referred to as a “near-cash” assistance program because the benefits, which come in the form of coupons that can be used to purchase food, are nearly fungible with cash.

The United States social welfare programs are based on a philosophy that is pro-market and pro-growth, and opposed to large social welfare expenditures. The three means-tested programs covered in this Review accounted for .9 percent of GDP in 1996. All means-tested benefits together account for less than 4 percent of GDP.

Trends in caseloads are the result of four major exogenous factors: 1) program parameters and interactions with other programs, 2) economic conditions, 3) norms and values, and 4) demographic characteristics. Most research on caseloads tries to estimate the relative importance of the first two on caseloads. Labor market work, marriage, fertility, and other endogenous behaviors of individual affect their eligibility for welfare programs. AFDC and food stamps reduce the work effort of single mothers, but the size of the reduction is small. In fact it is probably too small to affect caseloads. AFDC also modestly increases single parenthood. The take-up rate among individuals eligible for programs is also an important determinant of caseloads.

The research on caseloads has many limitations. It is almost all based on reduced-form models, which tell us little about the causal mechanisms through which exogenous factors affect caseloads. The theory about these causal mechanisms is weak resulting in the possibility of misspecification and many key variables are poorly measured or omitted.

Even given these limitations some conclusions can be drawn. All else equal as welfare programs become more generous the caseload grows. Caseload changes are greatest when two or more of the four exogenous factors provide similar incentives for people to alter their behavior. For example, recent declines in AFDC and the FSP caseloads appear to be the result of the combined effect of the strong economy and policy changes that made work both more available and more attractive. Similarly, program interactions are important. When programs provide opposing incentives they reduce the response to either incentive, and when incentives structures are similar, the behavioral response is greater. Finally, incentives do not affect everyone in the same way. Program changes that benefit some recipients may hurt others.

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This report reviews research on the causes of fluctuations in the caseloads of the two main means-tested income transfer programs in the United States, Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (SSI). It also reviews research that tries to account for the decline in welfare caseloads after 1996 when AFDC was replaced with the Temporary Assistance to Needy Families (TANF). Finally, it reviews research on trends in the Food Stamp Program (FSP) caseloads. The FSP is often referred to as a “near-cash” assistance program because the benefits, which come in the form of coupons that can be used to purchase food, are nearly fungible with cash.

This Report is divided into six sections. The first section provides background on the history of welfare state programs in the United States with special emphasis on the three programs that are the focus of this review. The second section provides background on social science theories of welfare participation. The next three sections review the research on trends in caseloads in each of the three programs. The final section provides tentative methodological and policy conclusions that can be drawn from this research.

I. Background on American Welfare State Programs

As is the case with all welfare states, the United States relies on both “benefit programs” and “non-benefit programs” to help the poor. By a benefit program I mean a program that transfers income or goods and services directly to individuals or families. Americans are perhaps more suspicious of the efficacy of income transfer programs, so they have relied heavily on non-benefit programs to help the poor. A major premise of the American welfare state is that a free labor market is the first and best defense against poverty, and that fostering equal opportunity in education and employment will maximize both economic growth and economic

well-being for individual families. Thus many non-benefit programs are intended to foster equal opportunity and a free labor market and to thereby disproportionately benefit the poor.

Non-benefit policies try to redistribute resources without spending much federal government money, so they are sometimes called “unfunded mandates.” Some of these unfunded mandates are aimed at employers. For example, the Fair Labor Standards Act of 1938 established a national minimum wage, the Wagner Act also passed as part of the New Deal guaranteed workers the right to bargain collectively, and Title VII of the Civil Rights Act tried to prevent discrimination in employment and government funded services. Other non-benefit policies limit the kinds of workers an employer can hire. Child labor laws are one example. Restrictions on immigration are a more important current example.

Although non-benefit programs have had an important effect on the poor, in this section I discuss only benefit programs. I first present a very brief history of America’s major social welfare programs with an emphasis on the three programs that are the topic of this review.¹ I then turn to some historical data on caseloads and expenditures on these three programs. This is not intended to provide a comprehensive history of social welfare programs in the United States but only to provide the context for the review of the empirical research on caseload trends.

Before turning to the history of social welfare programs, it is useful to address two issues related to income in the United States. The first issue is how to interpret the levels of income that I describe throughout the Report. The second is how income is adjusted for changes in prices. This is important because I often describe trends in expenditures or benefits in constant dollars for ease of interpretation. Table 1 shows a variety of income statistics for the United States in 1996. I show income amounts for 1996 because this is the latest year for which much of the income data is available. Table 1 shows that the median household income in 1996 was \$35,492 and the official poverty line for a family of three was \$12,273.

Throughout this Report I try to express dollar amounts in constant 1996 or 1997 purchasing power. To do this I need to adjust dollar amounts for changes in prices. In most cases I use the Consumer Price Index for urban consumers (CPI-U). The Census Bureau uses the CPI-U to adjust the poverty thresholds and other income measures for inflation. Recent reviews

¹ The background in this section is necessarily incomplete. Interested readers are referred to Blank (1997), Trattner (1989), Danziger and Weinberg (1994), Katz (1986, 1989) and many other sources for more in depth overviews of the American system of social welfare policies. Detailed descriptions of most programs described in this Report can be found in the U.S. House of Representatives for various year.

suggest that the CPI-U over-states inflation.² Alternative price indices are available, but these suffer from problems as well. Different price indices can yield very different estimates of changes in prices over time, but in all cases the CPI-U yields the greatest growth in prices. For example, the average annual change in prices in the 1970s ranges from 7.1 percent using the CPI-U to 5.2 percent using what is known as the Personal Consumption Expenditure index. In the 1980s the change was 5.5 percent using the CPI, and 5.2 percent using the PCE. Because the CPI-U over-states inflation it over-states the decline in welfare benefits over time and understates the increase in program expenditures. I note when I use a price index other than the CPI.

Throughout this Report I refer to several large national data sets that have been used for most of the research related to welfare caseloads. These are briefly described in Appendix 1.

A. Brief History of Major Welfare State Programs³

America's major social welfare programs were primarily implemented in three historical periods: the New Deal of the 1930s, the war on poverty programs of the 1960s, and the "second" war on poverty in the early 1970s. By the middle of the 1970s all the major social welfare programs had been enacted. During the 1980s Congress made some important changes to these programs, including some, such as the 1988 Family Support Act, that were precursors of the major changes to means-tested welfare programs that occurred in 1996.

Table 2 lists the major social welfare programs in the United States and how much the federal government spent on each in 1996. This table omits many smaller programs and does not

² Advisory Commission to Study the Consumer Price Index (1996), Peterson (1994). The Bureau of Labor Statistics (BLS) eliminated the CPI's best known defect in 1983, when it stopped using changes in the purchase price of residential homes to estimate changes in the cost of living in such a home. But BLS never made this change retroactive, so the CPI-U still overstates the increase in housing costs prior to 1983. BLS does provide an alternative measure, the CPI-U-X1, which indicates what would have happened to the CPI-U if the 1983 change had been made retroactive to 1967. The CPI-U-X1 still has all the other problems of the current CPI-U. The way BLS picks the goods and services whose price it tracked also inflates the CPI. Unmeasured changes in the quality of rental housing, in contrast, produced a downward bias in the pre-1988 CPI and PCE. Like any fixed-weight index, the CPI understates the speed with which consumers reduce their purchases of things whose relative price has risen unusually fast. This substitution bias inflates the CPI by an average of at least 0.2 percent per year (Peterson, 1994) and perhaps as much as 0.5 percent (Advisory Commission to Study the Consumer Price Index, 1995).

³ Much of this brief history of U.S. social welfare programs draws heavily on work that I am doing jointly with Christopher Jencks for a book manuscript titled, *Did We Lose the War on Poverty*. I acknowledge Jencks for his contribution to that book and hence to this section of the Report.

included state expenditures.⁴ As I discuss below states provide a significant proportion of expenditures for some of these programs. Table 2 shows that federal expenditures on the three programs that are the focus of this report amounted to \$66.1 billion, which was .9 percent of Gross Domestic Product in that year.⁵ As I discuss below, states contribute a large proportion of expenditures for many of these programs.

I now turn to a discussion of the evolution of these programs.

A.1 New Deal. Franklin Roosevelt arrived in the White House in 1933 in the aftermath of the Great Depression. Up to this time there had been little government help for the poor, and what there was was mainly provided by states or counties. But the Depression left staggering numbers of Americans destitute. The main goal of Roosevelt's New Deal was to revive the economy and put everyone back to work. Some northern liberals wanted to do more. For them, the ultimate goal was to ensure that the benefits of economic recovery were more equitably distributed than they had been before the stock market crash of 1929.

Their efforts led to several major pieces of legislation that left a mark on low-income Americans. For the non-working poor, the key piece of legislation was the Social Security Act of 1935. The Social Security Act was designed to help individuals whom legislators did not want to work. To help such people, it created two kinds of federal cash assistance: social insurance, which was not means-tested and public assistance, which was. Social insurance now takes three forms: retirement benefits for the elderly ("social security"), benefits for the permanently disabled, and short-term unemployment insurance for individuals who have lost their job and are looking for another one. These programs are financed by payroll taxes, and benefits are limited to individuals whose employer has contributed to the system. High-wage workers also get more generous benefits than low-wage workers, although low-wage workers get a higher return on their contributions.

As Table 2 shows retirement benefits for the elderly are by far the largest component of this system and they have probably done more to reduce poverty in the United States than any

⁴ The federal government has dozens of social welfare programs. In Table 2 I have included programs with annual federal expenditures of at least \$3.5 billion. However, if it is not always clear what a "program" is. One might consider all child nutrition programs separately or group them together as one program. If one groups programs there is always a debate about what should be grouped with what. For the purposes of this table I did not group programs together.

⁵ U.S. House of Representatives, 1998, page 1355.

other federal program. Most of the benefits go to people with incomes well above the poverty line, few Americans think of social security as an anti-poverty program even though social security benefits are redistributive.

Unlike social insurance, public assistance benefits are financed by general tax revenues. Benefits depend on individuals' current need, not their past earnings. Until 1969, the largest public assistance program was Old Age Assistance (OAA). OAA was designed for people who did not qualify for social security, either because they had retired before the Act was passed or because they had worked in an uncovered industry. Benefits were uniformly low, but they made a big difference to millions of old people.

Aid to Dependent Children (later changed to Aid to Families with Dependent Children, or AFDC) was public assistance for single mothers and their children. It replaced the "mothers' pensions" that some states had established early in the century. Like other forms of public assistance, ADC was originally run by the states. During the 1940s and 1950s most states treated ADC as a form of publicly financed charity and they gave local case workers considerable discretion about giving or withholding benefits. Washington's main role was to pay part of the bills.

In 1937 the federal government began making grants to local housing authorities for public housing. The idea was that Washington would finance construction costs and the local authorities would then operate the projects, using their rental income to pay for maintenance. Because rents were limited to 25 percent of income (30 percent after 1981), many local authorities were reluctant to admit very poor tenants, since these tenants could not pay enough to support their share of the building's maintenance. Those projects that did admit very poor tenants had trouble attracting more affluent tenants. As a result, they were often badly maintained and quite dangerous. Because local authorities managed public housing, the recipients of this varied greatly not only across states but also across cities in states.

Until the 1960s these programs formed America's welfare state effort.

A.2 The First War on Poverty. The war on poverty initiated by Lyndon Johnson in 1964, added three enduring legacies to America's social welfare programs: compensatory education, subsidies for needy college students, and Medicaid.

Lyndon Johnson first outlined his plans for a war on poverty in the *Economic Report* that he sent to Congress in January, 1964.⁶ Drafted by his Council of Economic Advisors, this report outlined a strategy that reflected the thinking of most liberal economists at the time. It also represented a sharp break with the New Deal approach, which had limited itself to making modest cash payments to the very poor and leaving the states with a lot of discretion in their efforts to help the poor. Johnson's approach was more ambitious. The key to reducing poverty, his report argued, was "building individual earning power." To achieve this goal the federal government should do five things: improve poor children's schooling, make health care more accessible to the poor, help poor adults acquire more skills, rehabilitate economically depressed communities, and eliminate racial discrimination.

This list reflected economists' growing belief that what they were beginning to call "investment in human capital" was the key to both economic growth and a more equal distribution of income. The report did recognize that skill enhancement could never be expected to eliminate *all* poverty. It therefore alluded briefly to a second strategy for reducing poverty, which was to "protect individuals and their families from poverty when their own earnings are insufficient because of age, disability, unemployment, or other family circumstances." But Johnson's proposals for helping such people were cautious. He did not ask for any increase in cash benefits for the elderly, the disabled, or single parents.

Johnson, following Roosevelt, believed that handouts had a corrosive effect on the poor. This made cash aid for able-bodied men out of the question and cash aid for single mothers a necessary evil. ADC had been established because it was cheaper than alternative ways to support destitute children such as foster care and orphanages. Denying benefits to unwed mothers would have forced states to spend more on such alternatives. In addition, by the 1950s a growing number of politicians began to complain that ADC encouraged single parenthood. Thus, Johnson had no inclinations to be more generous with single parents. His only important proposal for helping the non-working poor was that Washington should underwrite health care for the elderly.

Originally AFDC was available only to families with children and only one able-bodied adult, almost always the mother and almost always a widow.⁷ Beginning in 1961 states had the

⁶ See Council of Economic Advisors, 1964.

option to provide benefits to families with two parents when the parents were unemployed. This option is known as the AFDC-UP (for “unemployed parent” program). The program for single parents is known as the AFDC-Basic program. About half of states did operate AFDC-UP programs.

In the South, where black mothers had always been expected to work, whites criticized ADC for discouraging black women from taking jobs in agriculture or as domestic workers. As more white mothers moved into the paid labor force, Northern legislators began echoing this complaint. Congress passed the first legislation aimed at putting welfare mothers to work in 1967, and it pursued this goal unsuccessfully throughout the 1970s and 1980s.

In the 1940s and 1950s, a mother's need for public assistance was often seen as prima facie evidence of her incompetence, and most states employed case workers to help recipients manage their lives better. Case workers routinely made home visits, partly to check on whether the recipient was living with a man but also to see whether the children were getting a nutritious diet, the house was kept clean, and so on. But case workers had a lot of discretion. They could deny benefits to women who they suspected of “immoral” behavior or poor parenting practices.

During the 1960s the Supreme Court outlawed the “man in the house” rule, which had allowed social workers to make unannounced visits to recipients’ homes to search for signs that a man might be living there. The Court also over-turned rules requiring families to reside in a state for a specified period of time before becoming eligible for benefits. Many states had different work rules for black and white recipients and these were also over-turned. The courts also required due process for families denied benefits. These decisions greatly expanded the number of families, especially black families, eligible for AFDC benefits.⁸

Congress passed the bill authorizing Medicaid in 1965. It funded up to 85 percent of a state's cost for providing medical care to low-income individuals who were blind, disabled, aged and members of poor families with children. Medicaid is by far the largest government program

⁷ U.S. House of Representatives, 1993, provides a legislative history of AFDC.

⁸ These lawsuits were brought by welfare rights groups partly because the federal government was paying a greater share of expenditures on AFDC and therefore could reasonably be expected to enforce a stronger set of rules. The Social Security Act had required the federal government to pay only a third of the costs associated with ADC. In 1956 variable matching rates were enacted to allow the federal government to pay more in states with lower per capita income. It was not until 1965 that the federal government could match state expenditures on AFDC (U.S. House of Representatives, 1998, page 405).

providing medical care to the poor with outlays of \$92 billion in 1996. The Veterans Administration (VA) also provides free medical care for low-income veterans, even if their disabilities are not related to their military service. Prior to the establishment of Medicaid, most states also had some system for covering public assistance recipients' hospital bills and many hospitals and physicians provided uncompensated care to the poor.

When the Johnson Administration was trying to devise a strategy for improving poor people's job skills, the existing educational system was widely seen as having two major problems. At the elementary and secondary levels, poor children mostly attended school, but they learned less than their more affluent classmates. At the post-secondary level, students from poor families seldom enrolled at all. Most reformers believed that money could help solve both these problems. At the elementary and secondary level, the idea was to equalize the amount spent on schools serving rich and poor children. At the post-secondary level the goal was to provide scholarships and loans to students from low-income families, so that they could compete on equal terms with students whose families were paying their college bills.

Title 1 (later Chapter 1) of the Elementary and Secondary Education Act provided federal money to schools with high proportions of low-income children. This money was supposed to be used for programs that helped students with learning problems catch up with their classmates. In the same spirit, the Johnson Administration created Head Start to ensure that poor children whose home environment did not prepare them for school would nonetheless start kindergarten as well prepared as anyone else. Head Start provides a wide range of services primarily to low-income pre-school children and their families. Its goal is to improve the cognitive skills, social skills, health, and nutrition of such children. Most participants in Head Start attend a half-day of pre-school three to five days a week.

Federal guidelines about how Chapter 1 money is to be spent have always been very broad ensuring that school districts and even individual schools use the money in very different ways and with varying degrees of success. Head Start, though politically popular, has never been fully funded, so a relatively small share of poor children participate. In 1996 less than a third of income-eligible children were enrolled in Head Start.

At the other end of the pipeline were a few programs, like Upward Bound, that were supposed to increase the proportion of poor high school students who attended college. But the most important programs, at least in terms of cost, were those providing grants and subsidized

loans to needy college students. For those who did not attend college, the Economic Opportunity Act established a variety of job training programs for the poor, such as the Job Corps and later Comprehensive Employment and Training Act (CETA).

A.3 The Second War on Poverty. The third era of major new anti-poverty legislation was 1970-1976. During this period a series of struggles between Presidents Richard Nixon, Gerald Ford and Congress, added four more major programs: the FSP, SSI, Section 8 housing, and the Earned Income Tax Credit (EITC).

Because AFDC was an "entitlement" available to any family that met the program's eligibility standards its cost depended partly on the number of poor single parent families. The proportion of children living in single parent families had risen steadily since 1960 (see below). Between 1960 and 1975 the proportion of single parents collecting AFDC also rose sharply, going from under 30 percent in the early 1960s to around 60 percent in the mid-1970s. Participation in AFDC rose among single mothers partly because of the Supreme Court rulings that increased eligibility for AFDC and partly because benefits became more generous. Because of these trends the number of AFDC recipients and public spending on means-tested transfers increased rapidly.

Many legislators were disturbed by the growth of AFDC and suspected that it had actually caused some of the increase in single parenthood. At the same time race riots in major American cities focused attention on slums and "urban blight." Nixon disliked the patchwork of programs created and expanded by Johnson's war on poverty. In addition, enthusiasm for the "human capital" approach to reducing poverty was tempered by a series of influential studies that seemed to show that "throwing money at the problem" would not help disadvantaged students learn more. In 1966 the Coleman Report showed that student achievement was far more strongly linked to their family background than to the resources available in their schools. Another major study had found that while Head Start produced modest short-term increases in disadvantaged children's IQ scores, these gains were not sustained once the children entered the public schools.⁹ Other studies raised serious doubts about whether compensatory education was raising elementary school students' reading scores.¹⁰ While all this research had flaws, even those who

⁹ See Westinghouse Learning Corporation/Ohio University, 1969.

¹⁰ See John W. McDavid (1969) and Harry Picciarelli (1969).

remained committed to the "human capital" strategy had to admit that it would not pay off for years. After five years of racial turmoil and growing welfare rolls, few politicians felt they could afford to wait that long.

Most, including Nixon, wanted an anti-poverty strategy that would produce more immediate benefits. Nixon proposed a Family Assistance Plan (FAP), which was a national negative income-tax that would have federalized the costs of public assistance and extended benefits to some working people who had not previously been covered. Congressional Democrats were unenthusiastic about FAP. Welfare activists mostly opposed the program because it would have made a few of the non-working poor worse off. Conservative Republicans were also hostile to FAP, because they knew it would cost money and feared it would discourage work. After several years of debate, the plan died in 1972.

Having defeated FAP, many legislators still wanted to do more for the "deserving" poor, notably the aged, blind, and disabled. They therefore enacted Supplemental Security Income (SSI) in 1972 and began implementing it in 1975. SSI provides cash assistance to financially needy individuals who are aged, blind, or disabled. Like FAP, SSI set a national minimum income for everyone in the eligible population, along with national eligibility standards. Unlike AFDC, SSI benefits were indexed to inflation. Disability is defined as a mental or physical impairment so severe that it prevents the individual from doing any work.

The enactment of SSI did not imply any basic shift in the way Americans thought about poverty. It still provided a minimum income to individuals who were not expected to work. However, a more fundamental change in the way Congress thought about poverty also began at around this time. This was the expansion of means-tested non-cash benefits.

The federal government ran a tiny food stamp program during the 1960s and the Food Stamp Act of 1964 authorized the federal government to provide coupons for the purchase of food to low income individuals and families. But the FSP did not become important until 1972, when FAP went down to defeat. At that point Congress turned the FSP into a kind of guaranteed annual income indexed to inflation. Every low-income family was eligible, and benefits were the same throughout the continental United States.¹¹ Food stamp benefits and rules became nationally uniform in 1974. Since then food stamp benefits have been adjusted for changes in food prices, first semi-annually then eventually annually with a few exceptions.

¹¹ See Trippe et al. 1992 for an excellent summary of the legislative history of the Food Stamp Program.

Between 1974, when it became a nation-wide program, and 1981 several administrative changes made food stamps easier to get. One important change was that determination of eligibility for AFDC and food stamps was consolidated so that both could be done in AFDC offices. A second important change was that prior to 1977 recipients had to purchase food stamp coupons for a portion of their face-value. Since 1977 the federal government has paid the full costs of food stamps.

By the end of the 1960s public housing had acquired such a bad reputation that Congress began looking for alternatives. Starting in 1974, Section 8 of the Housing Act began providing rent subsidies for low-income tenants in privately owned housing. Section 8 makes up the difference between a private unit's market rent (not to exceed the "fair market rent" for a given housing market as established by the federal government) and the tenant's federally mandated share, which is currently 30 percent of the household's total income. Today the bulk of public spending on low-income housing is for rent subsidies for private rental units. Public housing is relatively rare even for very poor families. In 1995 only 8 percent of AFDC recipients lived in public housing, and most did not live in the high rise public housing projects than have become notorious for their crime and gangs.

The three main non-cash programs - Medicaid, food stamps and housing subsidies - have recently proven more politically resilient than AFDC for two reasons.¹² First, they reassure skeptical taxpayers that the money is mostly going for things they favor, like better food, housing, and medical care, and not for things they oppose, like drugs, alcohol, tobacco, and fancy clothes. Second, by focussing on food, housing, and medical care, these non-cash programs help mobilize support from prospective providers. Hospitals fight for Medicaid, because otherwise their bills for uncompensated care would be higher. Farm state representatives support food stamps, on the (somewhat problematic) grounds that they drive up food consumption. Builders favor some forms of low-income housing, because they can make money creating it.

The last major addition to the American welfare state was the Earned Income Tax Credit (EITC, or as it now sometimes called the Earned Income Credit or EIC). It was enacted in 1975, dramatically expanded in 1986 and 1994 after which it continued to be expanded.¹³ The EITC is

¹³ For a history of the EITC see Ventry, 1999.

a wage subsidy for low-wage workers received as a credit when paying taxes. The EITC is a *refundable* tax credit, which means that families whose earnings are so low that they do not have to pay any federal taxes can still receive the credit as a direct payment from the Treasury.

A.4 The 1980s. By the end of the 1970s the major programs of the American welfare state were in place. But there were important changes to those programs in the 1980s and 1990s that affected program caseloads. The major changes were to Medicaid and AFDC.

Ronald Reagan came to office on a political platform that emphasized reducing the federal budget and the role of the federal government in the lives of the American people. Reagan had no particular vision for welfare reform. His reforms were mainly motivated by a desire to reduce spending.

In 1981 Congress passed an Omnibus Budget Reconciliation Act. It reduced the number of families eligible for AFDC by lowering the income at which families were eligible. Prior to the 1981 OBRA, federal law required states to deduct \$30 in work expenses plus an additional third of earned income when determining eligibility and benefit levels for AFDC. This was known as the “30-and-a-third rule.” The 1981 OBRA restricted the 30-and-a-third rule to four months, after which all earnings and costs of work were counted against AFDC benefit levels. This in effect raised the tax on earnings for AFDC recipients and lowered the income at which they were eligible for benefits. For example, prior to implementation of the 1981 OBRA, if a woman earned \$300 in a month, \$30.00 plus \$100 (a third of \$300) was deducted before her eligibility and AFDC benefits were determined. So her countable income was \$170. After the 1981 OBRA, once this woman had been on AFDC for four months all \$300 of her earnings counted against her eligibility and benefit level. If the income cut-off in a state was \$200 per month, a woman earning \$300 qualified before the 1981 OBRA was implemented. This was lowered to \$200 after the 1981 OBRA. Some of these changes were reversed in 1984 when the 30-and-a-third rule was extended to apply for a year.

The 1981 OBRA also slowed the increase in food stamp benefits by delaying cost of living increases and making some groups (such as strikers and college students) ineligible for food stamps altogether. Congress liberalized food stamp eligibility in 1985, easing limits on assets and several forms of cash assistance and removing address requirements that had prevented the

homeless from getting food stamps. The Hunger Prevention Act of 1988 increased food stamp benefits across the board.

Recipients of AFDC and now TANF have always been categorically eligible for Medicaid. But when families left AFDC either because the mother went to work or because she married, the family lost public health insurance coverage. These were often not replaced with private health insurance because welfare recipients usually have to take low-paying jobs with few employer-provided benefits. Some states had an optional Medicaid program called the “Medically Needy” program. In these states some families who were not eligible for AFDC but who had high medical expenses could get Medicaid. But this did not apply to families whose members were in relatively good health. Many people thought that the connection between Medicaid and AFDC discouraged single mothers from working and that this disincentive was growing more important as the cost of health care increased. Several reforms to Medicaid were designed to loosen the connection between Medicaid and AFDC.

In 1986 Congress extended Medicaid coverage to pregnant women and children under six years old whose family income was less than 133 percent of the poverty line. In 1988 Congress required states to extend Medicaid coverage for up to one year to former AFDC recipients who became ineligible for AFDC because their earnings from work increased. In 1991 Congress extended Medicaid to cover all poor children born after 1983. As a result of these changes, two-thirds of children living below the poverty line received Medicaid in 1991 compared to only half in 1987, even though the 1991 changes in eligibility were probably not fully implemented in that year.¹⁴

Several legislative changes in the 1980s dramatically cut appropriations for new spending on federal housing assistance. However, because housing commitments are generally long-term, the number of families receiving housing assistance continued to increase. Expenditures on housing for poor families also increased rapidly in the 1980s due to both an increase in the number of households receiving housing subsidies and an increase in the subsidy per household. The total number of households receiving federal rental assistance increased from 2.9 million in

¹⁴ The number of children covered by Medicaid in 1991 comes from U.S. House of Representatives, 1993, page 1639. The number for 1987 is from U.S. Bureau of the Census 1990, table 148.

1980 to 4.5 million in 1990. The government outlay per unit increased from \$3,480 in 1980 to \$4,480 in 1996 (in constant dollars).¹⁵

In 1988 Congress passed the Family Support Act. It was the first step towards the dramatic 1996 revision of welfare. The Family Support Act was partly a response to the growing consensus that single mothers should be self-sufficient. Congress required all states to operate work placement programs for AFDC recipients who were “work-eligible.” These programs were called Job Opportunity and Basic Skills (JOBS) programs and they replaced earlier work programs including the work incentive (WIN) program. Congress provided matching funds to states to operate such programs. Women whose children were younger than three years or who had disabilities were not considered work eligible.

States had considerable flexibility in the kinds of JOBS programs that they ran. For example, in 1995 the share of the state’s JOBS participants in post-secondary education ranged from .3 percent to 38.0 percent. The share of JOBS participants in Community Work Experience Programs (a public works program) ranged from zero percent in one state to 30 percent in several states. Most states operated minimal programs and most participants received little more than help in searching for jobs. Nationwide in 1995 only 26.8 percent of AFDC adults who were required to participate in JOBS programs actually participated.¹⁶

The Family Support Act also required that beginning in October 1990 all states offer AFDC-UP.¹⁷ The AFDC-UP program remained a small part of the overall AFDC program. In 1970 only 3 percent of AFDC recipient families nationwide received benefits through AFDC-UP. In 1980 3.9 percent received such benefits. By 1996 only 6.6 percent received AFDC-UP benefits. Thus AFDC remained largely a program for single mothers and their children.

Unlike prior federal efforts to get welfare recipients to work, the Family Support Act required states to provide child care subsidies for mothers who went to work or job training. It

¹⁵ Data on number of households receiving subsidies is from U.S. House of Representatives, 1998, page 994. Data on expenditure per unit is from page 997.

¹⁶ Information on JOBS programs comes from U.S. House of Representatives, 1998, pages 472- 489.

¹⁷ The Family Support Act required all states to AFDC to children in two-parent families who are needy because of the unemployment of one parent. States that did not have an AFDC-UP program prior to September 26, 1988 were allowed to limit benefits under the AFDC-UP program to as few as six months in a calendar year (U.S. House of Representatives, 1998, page 603).

also provided funds to states to provide child care to families not receiving AFDC who need such care in order to work and would otherwise be at risk of receiving AFDC.

A.5 The Clinton Years. Clinton came to office on a platform that promised changes in welfare. Since 1962 the federal government has had the authority to grant waivers to states that proposed experimental or pilot programs consistent with the goals of AFDC. But beginning in 1994 the number of waivers increased dramatically. By 1996 the Clinton Administration had granted waivers to forty-three states. The waivers differed dramatically across states, but most included some combination of time limits on welfare receipt, increased work requirements, expanded earning disregards in the calculation of eligibility and benefits, and “family caps” which eliminated the increases in benefits that women had previously gotten when they had an additional child.

Many of these waivers implemented program parameters that were eventually incorporated in the 1996 Personal Responsibility and Work Opportunities Act (PRWORA), which was the most important social welfare legislation of the Clinton Administration. As part of this bill AFDC was replaced by a block grant to states called Temporary Assistance to Needy People (TANF).¹⁸ TANF differs from AFDC in several ways. It provides states much more autonomy in implementing their welfare programs. As with AFDC income limits and benefit levels are set by the state. But unlike AFDC TANF is not an entitlement program, so states can decide themselves what categories of families to make eligible. In addition TANF explicitly allows states to administer programs through charitable, religious or private organizations. For most states TANF has provided substantially more funds than they would have received through AFDC, because the size of TANF block grants was based on funding levels during previous years with larger caseloads.

To receive the full block grant states must meet specific targets for having TANF recipients in work activities and states are required to spend some state funds for this purpose. TANF requires recipients to be engaged in work activities after a maximum of two years of benefits. This requirement is phased in over several years. States can opt to set shorter time

¹⁸ A block grant is a lump sum of money that goes to states to be used by the state for a very broad set of programs. States receive other block grants for social welfare services as well. For example, the Title XX Social Services Block Grant provides money to states to help them provide services directed at any one or more of five goals. These goals are extremely broad: one reads “achieving or maintaining economic self-support to prevent, reduce, or eliminate dependency.” It is nearly impossible to summarize or even know how block grant money is spent and I do not discuss them in this Report.

frames for recipients to begin working and many states have done so. TANF sets a five-year life-time limit on receipt of benefits. States can exempt up to 20 percent of their base caseload for reasons of hardship. States can adopt shorter time limits and many have done so. These time limits did not begin to take effect until late in 1998, so almost no research on the effect of these time limits has been completed.

TANF explicitly forbids the use of federal money to provide benefits to unwed mothers under the age of eighteen who do not live with an adult relative or other adult supervisor and unwed mothers under eighteen years who do not have a high school diploma and are not enrolled in school. States may also not use federal money to provide benefits to new immigrants until they have been in the United States for five years.

The welfare reform legislation of 1996 also enacted significant changes to the FSP. Because of changes in how income is counted and a reduction in the income threshold for the maximum benefit, food stamp benefits fell from an average of about 80 cents per person per meal to 75 cents. PRWORA also limited eligibility for food stamps among childless able-bodied adults to no more than six months in a 36-month period unless the recipient works at least half time or is enrolled in a work training program. As part of welfare reform some states have administratively separated the application process for food stamps from the application process for TANF, presumably increasing the transaction costs associated with getting food stamps. PROWRA made most adult legal immigrants ineligible for the FSP.

Although PRWORA was the most important social policy legislation of the Clinton Administration, it was not the only one. In 1993 the Balanced Budget Act increased funding and expanded eligibility for Medicaid. The Children's Health Insurance Program (CHIP) provides federal funds to states to expand health insurance coverage of uninsured children whose family income is up to 185 percent of the federal poverty line.¹⁹ The funds can be used to expand Medicaid eligibility or to create a separate program. The changes to Medicaid that began with the 1988 Family Support Act have resulted in a significant number of additional low-income children receiving government health benefits. Between 1984 and 1995 the number of children

¹⁹ I do not discuss the official poverty measure or poverty rates in this Review. Historically few major means-tested programs were tied in a straightforward way to the poverty line. The poverty thresholds have been seriously criticized and academics and policy makers agree that it tells us little about which families or individuals experience material hardship. See Citro and Michael 1995 for a critique of the poverty measure and a review of the extensive research literature on the official U.S. poverty measure.

covered by Medicaid increased 77 percent and the number of eligible adults with children increased 36 percent.²⁰ These expansions primarily affect non-welfare families with incomes close to the poverty line. This presumably makes work more attractive because a low-skilled woman can work without losing her health insurance benefits.

In addition, Congress repeatedly expanded the EITC. By 1997 the maximum credit for an earner with one child was \$2,210. A worker with two or more children could get \$3,656. The maximum credit went to families with earnings between \$9,140 and \$11,930. The credit declines for workers with higher earnings. In 1997 the EITC was completely phased out for workers with adjusted gross wages of \$29,290. For comparison, the average annual pay for workers was about \$29,000 in 1997. The median earnings for female full-time year around workers was \$23,172. The EITC is more popular in Congress than other cash transfer programs because it appears to encourage work rather than idleness. The EITC now transfers more cash to the poor than AFDC did before it was replaced with TANF.

In 1990 the Supreme Court decision in the *Sullivan v. Zebley* case required the federal government to revise the definition of disability used to assess children's eligibility for SSI. Prior to then to be eligible a child's disability had to correspond to one of the categories of disability on the Social Security Administration's "listing of impairments." In contrast adults could be declared eligible if either their disability fit one of these listings or if an individual assessment found a sufficiently limiting condition. The Supreme Court held that depending only on the listings for children did not satisfy the intent of the law, which was to gauge whether children's impairments were comparable in severity to impairments that would qualify an adult. The result was that many more children became eligible for SSI through individual assessments. In 1994 Congress passed a law that again restricted eligibility among disabled children and in 1996 it required all participants to have a disability that is included in the listing of impairments. At the same time they expanded this list. Nonetheless, as a result of the 1996 changes many children were expected to lose their SSI benefits.

²⁰ The size of Medicaid caseloads is not always a good indicator of the scope of the Medicaid program. Many eligible families do not sign up for Medicaid until a family member is sick. Clinics and hospitals are very aggressive about getting eligible patients covered because this assures that their services will be paid for. Thus many people do not get Medicaid until they need it.

Major new social policies were enacted in the 1960s and early 1970s. In the 1980s and up to 1996 Congress and the President enacted major changes to the existing programs. But throughout both periods and before, America's approach to social welfare programs has always been pro-work, pro-growth and pro-low social welfare spending. Its pro-work stance is demonstrated by first its unwillingness to provide income support for "able-bodied" Americans and second by the great concern of policy-makers and the general public with the potential work disincentives of welfare programs, the rhetoric of human capital investment. Its pro-growth approach is demonstrated by the concern that disincentives to work will reduce productivity, that taxation to pay for social welfare programs will stifle growth, and in general its concern that interventions in the labor market will reduce productivity. Finally, its pro-low social welfare spending is demonstrated by the fact that social welfare spending as a percent of GDP is lower in the United States than in most other rich nations.²¹

Table 3 summarizes some of the major changes in work incentives that occurred during the 1980s and 1990s. It shows that when an unmarried mother of two children went from welfare to a job earning \$10,000 in the median state in 1986 she had to pay \$894 in taxes compared to \$765 in 1997. Similarly she lost \$5,924 in means-tested benefits in 1986, but only \$4,967 in 1997. She gained more in the EITC and in child care subsidies in 1997 compared to 1986. Taking all this into consideration, she would have \$6,924 in disposable income in 1997 compared to only \$2,107 in 1986. In addition, her children would remain covered by Medicaid in 1997 but not in 1986. The incentives to work increased a lot and at the same time the economy was very strong. As we will see the combination of these factors made a decline in welfare rolls inevitable.

B. The Role of States

The United States has historically relied a great deal on individual states both to provide their own social welfare programs and to implement federal programs. An on-going feature of the American political debate on domestic policies is the extent of state autonomy and an

²¹ Cross-country comparisons of social welfare spending are fraught with pitfalls. Categories of spending as well as need for spending vary across countries, as does the measure of GDP. Furthermore differences in spending do not necessarily result in differences in economic well-being (Mayer, 1993). Nonetheless, few would argue that the United States is not among the stingiest of nations when it comes to social welfare spending, especially for the non-elderly.

important feature of the history of social welfare programs is the extent to which they are funded and implemented by states or the federal government. The FSP and SSI are both federal programs with nationally uniform eligibility standards and benefit levels. In contrast AFDC was implemented by states. The federal government mandated a set of minimum standards that states had to adhere to in return for the federal government paying on average about half the cost of AFDC. But states had a great deal of latitude in setting eligibility rules and benefit levels. As a result eligibility rules and benefit levels varied greatly across states.

In 1996 AFDC benefits were \$636 per month for a family of three in the most generous state (not counting Alaska and Hawaii, which have unusually high benefits and unusually high costs of living) and only \$120 for a family of the same size in the least generous state. (See below for a discussion of trends in benefits levels.) Some of this difference is attributable to local variations in the cost of living, but still the purchasing power of AFDC benefits has always varied considerably across states. As I discuss below, the difference in benefit levels across states is often used to identify the effect of benefit levels on caseloads or participation in AFDC. TANF provides even more autonomy to states.

Although SSI is a federal program, forty states currently have their own programs to augment SSI. As with AFDC the amount paid through these state programs varies greatly. In 1997 Connecticut paid the highest supplement, \$243 per month to an aged individuals living independently with no other income. Wyoming paid the lowest supplement of \$10 per month. SSI benefits are much less variable across states than AFDC benefits. In 1997 maximum SSI benefit (state and federal) for aged individuals was \$640 per month in California and the lowest was \$484 in many states. For an elderly couple living independently the SSI benefits varied from a high of \$1,254 in California to a low of \$726 in many states.

Seven states have their own EITC and of course tax policy including how much poor families are taxed varies greatly across states.

Because of the reliance on states to provide their own social welfare programs and to implement with varying degrees of autonomy federal programs, and the complex interactions among programs the actual welfare benefits available to families can vary greatly across states, and even across cities and counties within states. Thus when researchers estimate the effect of changes in federal spending or welfare parameters on caseloads, it is in the context of all the local variations in the program.

C. Interactions Among Programs.

Several types of interactions among social welfare programs could affect caseloads. The first kind of program interaction is *shared eligibility*. This means that anyone who is eligible for Program A is automatically income-eligible for Program B. For example, all families who were eligible for AFDC (and now TANF) or SSI were also eligible for Medicaid, food stamps, and several other food and nutrition programs.²² This means that as eligibility for AFDC increased eligibility for these other programs also increased. The reverse was not true, that is not everyone eligible for Medicaid or food stamps was eligible for AFDC. Thus growth in the number of people eligible for food stamps did not necessarily imply growth in the number of people eligible for AFDC.

Because of shared eligibility many families receive benefits from multiple programs and participation in multiple programs has increased somewhat over the last decade. In 1995 87.2 percent of households receiving AFDC also received food stamps and this number had risen from 81.4 percent in 1984.²³ Participation in Medicaid among households receiving AFDC increased from 93.2 percent in 1984 to 97.2 percent in 1995. In 1995 50.0 percent of households receiving SSI also received food stamps. Participation in the FSP among households receiving SSI had hardly changed from the 46.5 percent FSP benefits in 1984. Recipients of SSI and AFDC/TANF also usually qualify for housing subsidies.²⁴ But housing subsidies are not entitlements. Thus in 1995 31.1 percent of households receiving AFDC received some kind of rent subsidy. But this number had increased from 23.0 percent in 1984.

A second type of program interaction is *eligibility exclusion*. This occurs when recipients of Program A are automatically excluded from Program B. For example a person receiving SSI cannot also receive AFDC/TANF. To the extent that individuals are eligible for both Program A and Program B, an increase the caseloads of one will result in a decline in the caseloads of the

²² AFDC recipients are income eligible for the School Lunch Program, the School Breakfast Program and the Special Supplemental Nutrition Program for Women Infants and Children (U.S. House of Representatives, 1998, page 407). Many people who are eligible do not receive these benefits. For example, some eligible children may attend schools that do not participate in the School Breakfast or School Lunch Program.

²³ See U.S. House of Representatives, 1998, page 922.

²⁴ Throughout the remainder of this Report I will refer to AFDC/TANF when the same factors apply to both. I will refer to the programs individually when distinguishing between them.

other. It also means that programs compete for some recipients, so if SSI benefits are higher than AFDC/TANF benefits, individuals who can will switch from participating in AFDC/TANF to participating in SSI.

Two types of program interactions have to do with how resources are counted in determining eligibility and benefit levels. The first is *benefit inclusion*. This means that benefits from Program A are counted as income in determining eligibility or benefit levels for program B. For example, in the FSP for every additional dollar of income a family receives, its food stamp benefit is reduced by about 30 cents. AFDC benefits count as income. Thus if AFDC benefits increase food stamp benefits decrease. This has had two important implications. First, when AFDC benefit levels fell in real terms beginning in the early 1970s (benefit levels are discussed below), food stamps compensated for some of the loss. Second, in states with low AFDC/TANF benefits recipients get higher food stamp benefits. Thus differences across states in the combined AFDC and food stamp benefit are smaller than the difference in AFDC benefits. The highest state AFDC benefit was 5.3 times the benefit in the lowest paying state in 1996. The difference for the combined AFDC and food stamp benefits was a factor of only 2 in the same year.

The second program interaction having to do with how resources are counted is *benefit exclusion*. This happens when Program A disregards the benefits from Program B in determining eligibility or benefit levels. For example, income from the EITC could not be counted as income for determining AFDC benefit levels or eligibility. (States can decide how TANF treats EITC payments.) Similarly, a child who receives SSI cannot be counted as part of an AFDC/TANF unit. This means that the child's needs cannot not be taken into account in determining eligibility or benefit levels. But the child's SSI or other income cannot not be counted as available to the family and therefore cannot not be counted in determining the eligibility or the benefit level for other family members.

D. Trends in Expenditures on Means-tested Programs

This section describes trends on expenditures on social welfare programs. Expenditure trends are useful for understanding the context of the United States social welfare programs, but expenditure trends tell us little about caseload trends. Expenditures can increase both because benefit levels increase or because the number of recipients increase.

Total spending on social welfare programs (including social insurance and public assistance programs) in the United States has increased from 4.4 percent of GNP in 1960 to 12.9 percent in 1992. In price-adjusted dollars, total spending on such programs increased from \$92.8 billion in 1960 to \$703.5 billion in 1992. The trend in total expenditures obscures important differences among programs.

Figure 1 shows total state and federal expenditures on social welfare programs not counting education programs.²⁵ It shows that social security accounts for the greatest amount of total expenditures with expenditures for medical care a close second.

Figure 2 compares trends in spending on social insurance programs with trends in spending on means-tested cash and non-cash transfer programs and means-tested education and training programs.²⁶ The difference between spending on social insurance programs and spending on means-tested programs has grown. This is partly due to the fact that most social insurance expenditures are tied to inflation, while most means-tested benefits are not. In addition the proportion of the population covered by social insurance benefits (mainly the elderly whose employers paid into the system) increased faster than the proportion of the population covered by means-tested benefits. Since the 1960s the rhetoric of social welfare policies in the United States has been about increasing human capital. However, we have in fact spent relatively little on means-tested education and training programs compared to the amount that we have spent on means-tested cash and non-cash transfer programs.

Figure 3 shows that expenditures for means-tested cash transfers increased steeply from 1960 until 1975 then declined until the mid-1980s when they increased again. Most of the early increase was due to an increase in expenditures on AFDC. The growth after 1985 was due mainly to growth in the EITC and SSI.

Figure 4 shows spending on means-tested non-cash programs. By far the most expensive non-cash program is Medicaid. Most of the growth in expenditures on non-cash programs is

²⁵ In the United States the federal government contributes little to elementary and secondary school funding. Most of this funding is provided by states or local areas. School funding is not considered a transfer program and most of the money for schooling goes to children who are not low-income. Thus I have omitted it from Figure 1.

²⁶ Data in Figure 1 through Figure 4 are from Burtless, 1994. Expenditures include both federal and state spending and include expenditures on programs not discussed in this review such as expenditures on the school lunch and school breakfast programs, low-income energy assistance programs, and many others. Comparable data on all expenditure categories were not available for more recent years. Expenditures are adjusted for changes in prices to 1992 dollars using the Personal Consumption Expenditure index.

driven by expenditures on medical care, and most of those expenditures are for the elderly. Expenditures for food stamps and housing subsidies grew in the 1970s but were fairly flat in the 1980s.

Figure 5 compares expenditures on means-tested cash and non-cash transfers. Expenditures on non-cash programs surpassed spending on cash programs in the early 1970s.

E. Trends in Benefit Levels.

One of the biggest changes in AFDC after 1965 was the change in the generosity of benefits. There are several ways to assess the generosity of benefits. One way is to look at the average benefit for a family with fixed characteristics. Figure 5 shows that the benefit level for a family of three with no other income in the median state (arrayed by benefit level) has fallen over time. By 1996 when AFDC was eliminated benefits for such a family were about two-thirds their 1970 level.

Another way to assess benefit levels is to look at the average benefit per family. Figure 6 shows that trend for the average monthly benefit per family is very close to the trend for the maximum benefit for a family of three. The average monthly benefit per family is mainly a function of family size. Figure 6 also shows that the average monthly benefit per person did not decline as much as benefits per family. Thus part of the decline in benefits per family is due to the fact that the average size of welfare families has declined.²⁷ In 1960 the average size of a family receiving AFDC was 3.83 persons. It rose to 3.89 in 1970 then fell to 2.94 in 1980, 2.88 in 1990, and 2.78 in 1996.²⁸

Unlike AFDC, SSI benefit levels are adjusted annually for changes in prices. In constant 1996 dollars federal benefits for a single person living in an independent household have been around \$460 and benefits for a couple living independently have been around \$700 (both in 1996 dollars) since the program began. In 1975 benefit levels for individuals averaged 70.8 percent of the federal poverty level. By 1997 they were 77.2 percent of the poverty level. Benefit levels

²⁷ If the equivalence adjustment used to adjust for family size accurately captured economies of scale, the economic well-being of families on welfare would have actually increased over time. This is because cash welfare benefits per person have stayed about the same while non-cash benefits increased. However, we do not know if the equivalence adjustment is correct.

²⁸ U.S. House of Representatives, 1998, page 402.

for couples were somewhat more generous compared to the poverty threshold, averaging 84.6 percent of the poverty threshold in 1975 and 91.8 percent of the poverty threshold in 1997.²⁹

Food stamp benefit levels have been tied to inflation since 1975. The maximum food stamp allotment for a family of four has fluctuated between \$360 and \$400 in price-adjusted dollars over time. For comparison, in 1995 the average monthly expenditure on food for a three-person household was \$440. The average for all single parent households was \$298.³⁰ Increases have been due to Congress enacting real increases in food stamp benefits. In the early 1980s Congress delayed cost of living increases in some years resulting in real declines in benefits. Although maximum benefit levels have stayed relatively constant over time, the average food stamp benefit per person has increased. This is shown in Figure 7. Some of this increase is due to congressional generosity, but most of it is due to a decline in families' income from other sources.

Both AFDC and SSI recipients are eligible for food stamps. Thus when these benefits decline, food stamp benefits make up some of the difference. Thus between 1972 and 1992 AFDC benefits for a family of three declined by 42.2 percent while food stamp benefits for the same family increased by 37.6 percent. The combined AFDC and food stamp benefit decreased by 26.2 percent.³¹

AFDC, food stamps and SSI are all paid monthly. SSI benefits are for qualifying individuals. AFDC and food stamps are paid to the household head on behalf of all members of a family who qualify.

F. Trends in Caseloads.

Figure 8 shows trends in AFDC caseloads by type. The number of AFDC recipients increased between 1970 and 1973. With some annual fluctuations the AFDC rolls remained

²⁹ U.S. House of Representatives, 1998, page 292.

³⁰ These amounts are annual out-of-pocket expenditures on all food including food eaten at home and away from home divided by twelve. Expenditures are for "consumer units" rather than households as defined in most other surveys. Related persons living in the same housing unit are considered part of the same consumer unit. If unrelated people pool resources to buy food, housing, and other items, they are also members of the same consumer unit. If they are not related and do not pool resources for at least two categories of consumption, they constitute separate consumer units. Two percent of all households contain more than one CU. The data come from the 1995 Bureau of Labor Statistics Consumer Expenditure Survey.

³¹ U.S. House of Representatives, 1993, page 1240.

fairly constant until 1988 when they began to increase again. After 1995 the number of AFDC recipients began to decline. These trends are roughly the same for the proportion of families and the proportion of children receiving AFDC. As Figure 8 shows the number of AFDC-UP families has remained a small part of the overall AFDC caseload. Table 4 shows AFDC recipients as a percent of various population groups. The overall percent of U.S. children receiving benefits increased a lot beginning around 1990. The percent of poor children receiving benefits peaked around 1973 at 80.5 percent and declined to 60 percent in 1991.

Figure 9 shows that the number of SSI recipients declined somewhat between 1975 and 1983, partly reflecting a decline in the number of low-income elderly individuals and couples. Between 1973, two years before the program began, and 1989 the real income of elderly individuals increased 36.1 percent from \$12,472 to \$17,388 in (1996 dollars). Over the same period the income of elderly couples increased 23.4 percent from \$29,890 to 39,888. However, income fell for both individuals (by 1.8 percent) and couples (by 6.4 percent) between 1989 and 1994.

In 1975 when the program began, 75.6 percent of poor elderly individuals received SSI. By 1992 it has shrunk to 52.7 percent before rising to 63.7 percent in 1995.³² The number of SSI recipients grew rapidly after 1990, but the number of elderly SSI recipients continued to decline. The increase was due to an increase in the number of children and non-elderly adults (not shown) receiving benefits. The increase in child SSI cases is no doubt mainly a result of the Supreme Court decision in *Sullivan v. Zebley*.

Figure 10 shows that the average monthly number of participants in the FSP was 16.3 million persons in 1975 (the year after it became a nationally uniform program) and 25.5 million persons in 1996. This increase reflects an increase in the U.S. population as well as an increase in the likelihood that individuals will receive food stamps: the proportion of the population receiving food stamps increased from 7.6 percent in 1975 to a high of 10.4 percent in 1993. The number of food stamp recipients has fluctuated over time. As we will see this is partly due to changes in the program. Like most other means-tested programs, participation in the FSP has declined in recent years.

³² U.S. House of Representatives, 1998, page 307.

As this history suggests the United States relies, perhaps more than other rich developed countries, on families meeting their own economic needs through labor market work and living arrangements. American anti-poverty programs generally provide low benefits and these benefits have been almost entirely targeted at single parent families, the elderly, and the disabled because these groups were not expected to work in the labor market. The federal government has provided very little income support for able-bodied adults without children.

II. Background on the Theory of Welfare Caseloads

A. A Heuristic Model.

Caseloads (C) for program p at time t in state (or other geographic area) s are a function of how many people are eligible for the program (E) and the probability that eligible individuals or families “take-up” (T) or participate in the program:

$$C_{pts} = E_{pts} * T_{pts} \quad (1)$$

Caseloads are the sum of individual decisions about welfare participation. The economic theory of welfare participation is based on a discrete choice model in which a utility-maximizing individual considers whether to participate in the program by weighing the income-leisure combination that is possible on the program and off. Off the program an individual’s opportunities for income include marriage (or other joint living arrangements), labor market work, and other sources of income such as child support. On the program an individual’s income depends on the bundle of welfare benefits available in the person’s state, which in turn depends partly on non-welfare income. Because the programs that are the focus of this Review are means-tested, there is an income level above which individuals or families no longer qualify for the program. Families have some ability to alter their behavior to put themselves above or below this “notch” in the budget constraint. Economic theories of welfare participation try to take account of such behavioral responses.³³

The standard economic model suggests that program parameters (including interactions among programs and state program rules), macro-economic conditions, norms and values, and some demographic factors are exogenous “causes” of welfare caseloads. Figure 11 is a heuristic

³³ This section is intended to provide a brief background on the theory of welfare participation but not to explicate the details of such a theory. An interested reader should consult the large literature on the economic theory of means-tested benefits. See for example Ashenfelter (1983), Blank (1989), Moffitt (1985, 1992),

diagram of the relationship between various factors that affect caseloads. This diagram is not meant to represent a formal model of caseload size. As represented, the model could not be identified and, as we will see below, it is difficult to even parameterize many of the factors included in the model. However, Figure 11 is a useful guide for discussing research on caseload trends.

Figure 11 shows that program parameters, macro-economic condition, and “exogenous demographic characteristics” affect caseloads by affecting the number of people who are eligible for the program. They affect the number of people who are eligible directly and indirectly by affecting “endogenous demographic characteristics.” Not everyone who is eligible participates in a program. The “take-up rate” is a function of the norms and values that affect the stigma associated with receiving benefits and program parameters that affect the transaction costs associated with determining eligibility and getting benefits. Below I discuss the difference between endogenous and exogenous demographic characteristics.

A.1 Program Parameters. Figure 11 shows that the number of people who are eligible for a program depends on program rules, including the availability of other potentially competing programs. Program parameters are important determinants of caseloads partly because they directly determine eligibility but also because they provide incentives for people to alter their behavior. Both state and federal program parameters are important.

Historically, AFDC was a program for single mothers that imposed a high tax rate on earnings. In most cases a single mother who worked fulltime at the minimum wage earned too much to qualify for any AFDC benefits. Thus most single mothers had three choices: they could marry and forego welfare, they could work regularly in the labor force and forego welfare, or they could take welfare and forego both marriage and regular labor market work. Marriage and labor market work are thus “endogenous demographic characteristics” reflecting the fact that they are at least partly a response to welfare program parameters. Fertility is another potential endogenous demographic factor because women may choose the number of children that they have partly in response to welfare program rules. Food stamps have always been available to families who meet the income criteria regardless of their marital status, so marital status is relevant to eligibility only in so far as it affects family income and family size. SSI is mainly for the aged, blind and disabled who meet income criteria. Age is exogenous and though disability

can conceivably be partly endogenous to program rules, research usually treats it as exogenous. Age is an example of what I refer to as an “exogenous demographic characteristic.”

The two main program parameters of interest to American policy makers and researchers are the benefit level and the “benefit reduction rate.” All else equal more generous benefits should result in more people choosing welfare over other sources of income. As we have seen real AFDC benefit levels for families declined beginning in the early 1970s. If nothing else changed we would expect this to have reduced AFDC caseloads.

The benefit reduction rate is the amount that the government reduces welfare benefits for each dollars of non-welfare income that a recipient gets from earnings, child support, or other source. Because the main alternative source of income for a welfare recipient is labor market earnings, a high benefit reduction rate is equivalent to a high tax on earnings. For example, between 1988 and 1996 when a welfare recipient went to work, the first \$90 in earnings per month did not count against her benefits. Some expenses associated with work were also not counted. But for every dollar that she earned after that, her benefits were reduced by a dollar. The benefit reduction rate has changed over time. The “30-and-a-third” rule described above was in effect before 1988 and there were several variations on the 30-and-a-third rule over the years.

There is not agreement about how changes in the benefit reduction rate should affect work effort much less welfare caseloads. A tax on earnings has two contradictory effects. In response to a high tax on wages some individuals are likely to work less in the labor market because their foregone wage is less than it would be with a lower tax rate. But some individuals might work more to compensate for the lower wage.³⁴

Other rules affect eligibility and hence caseloads. Increasing the income level at which families are eligible for the program clearly increases the number of families who are eligible. As we will see changing definitions of disability can affect the SSI caseloads. As noted above, rules about program interactions affect eligibility and so does the relative generosity of

³⁴ The tax rate on earnings also affects eligibility for AFDC because as the tax rate decreases the amount of income that counts in the eligibility decision increases. For instance, when the \$90 disregard expired after four months, the tax rate on earnings increased and that \$90 also counted in determining whether the person was eligible for AFDC. Thus, an increase in the benefit reduction rate affects the size of the caseload both “mechanically” and through behavioral changes.

programs. As AFDC benefits fell relative to SSI benefits it became advantageous for parents to try to get their children SSI rather than AFDC benefits.

A.2 Endogenous and Exogenous Demographic Characteristics. There is room for debate about which demographic characteristics result from “choices” (endogenous) and which do not (exogenous). Everyone agrees that one cannot choose one’s age. But reasonable people can disagree about how much “choice” low-skilled single mothers have about whether they work in the labor market. There is a strong theoretical rationale for expecting work effort, marriage rates, and fertility to respond to labor market conditions and the kind of welfare programs implemented in the United States, so most research treats them as endogenous. For most means-tested programs eligibility and benefit levels depend both on a family’s income and on its need for income, where need is based on family size and perhaps a few other characteristics depending on the program. Thus they provide an incentive to alter factors, such as number of children, that affect need as defined by program parameters.

In the United States the endogenous demographic characteristic most likely to affect AFDC caseloads is the number of single parent families. Table 4 shows that the number of single parent families has increased over the last three decades both because the number of families has increased and because families have become more likely to be headed by a single woman. Divorced and widowed mothers are less likely than never married mothers to receive means-tested benefits, partly because they are more likely to have alternative income sources such as child support and partly because they are more likely to have skills that command a high enough wage to make working more attractive than welfare receipt. As Table 5 shows the number of families headed by a never married mother has increased and the share of all female-headed families that are headed by a never married mother has increased dramatically.

AFDC targeted poor children and both AFDC and food stamp benefits increased with the number of children in the household. Because fertility tends to be higher among married than unmarried women, another important way to look at the increase in single parenthood is by looking at the number of children living with only one parent. Table 6 shows that the percent of children living with one parent increased very rapidly in the 1970s and again in the 1980s. Children living with no parent are a growing part of the AFDC/TANF caseload. The last column in Table 6 shows that the number of children living with no parent has fluctuated, but it increased by 46 percent between 1990 and 1996.

Another potentially important endogenous demographic factor, especially for the FSP, is fertility rates. All else equal as the population caseloads will also increase. Most research on caseloads tries to predict either participation rates or caseload as a percent of the population. The participation rate is the number of participants in a program divided by the size of some population. For example, the participation rate of female-headed families is the percent of female headed families that are in the program. Population growth will not directly affect participation rates calculated in this way. However, fertility can affect caseloads because large families are more likely than small families to participate in means-tested programs. The United States' birth rate declined from 23.7 in 1960 to 18.4 in 1970 and continued to decline to 14.6 in 1975. It then rose to 15.9 in 1980 and 16.7 in 1990.³⁵ As noted above the size of the average AFDC family has shrunk, so the average size of a welfare family is now just about the average size for all U.S. families.

Other potentially important demographic changes are the aging of the population and the number of immigrants. All else equal, as the population ages we expect increases in SSI caseloads and decreases AFDC/TANF caseloads. The median age in the United States has increased steadily. Between 1980 and 1990 alone it increased from 30.0 years to 32.8 years. It then increased to 34.6 years in 1996. In 1970 9.7 percent of the population was over 65 years old. This increased to 11.1 percent in 1980 and 12.3 percent in 1990 and has stayed relatively constant through the 1990s.

Disability status is an important determinant of SSI participation. There are no trend data available for the kinds of serious disabilities that allow non-elderly adults or children to qualify for SSI. As we will see most of the disabling conditions that qualify non-elderly for SSI are mental health problems.

The number of immigrants can also affect social welfare caseloads. The number of legally admitted immigrants has fluctuated over time. But immigration rates have increased from 2.1 percent of the population during the 1970s to 3.1 percent during the 1980s and 4.1 percent between 1991 and 1995.³⁶ It is of course impossible to know how many illegal immigrants come to the United States. While some research suggests that legal and illegal

³⁵ U.S. House of Representatives, 1993, page 1135.

³⁶ U.S. Bureau of the Census, 1997 table 5.

immigrants may increase government expenditures for Medicaid, as we will see most research suggests that immigration plays a minor role in the size of welfare caseloads.

The model in Figure 11 suggests that everything that affects endogenous demographic characteristics could also affect eligibility and hence welfare caseloads. For example, educational attainment is probably the most important determinant of work effort among both men and women. A vast research literature documents the relationship between educational attainment and work effort and tries to explain why some people get more schooling than others. But educational attainment could be endogenous if welfare programs provide education and training opportunities or incentives to get more or less schooling. Many other influences on work, marriage and fertility are also likely to be endogenous with respect to the left side variables in Figure 11.

Reviewing all the research predicting work effort, marriage, fertility and other possible endogenous demographic characteristics is well beyond the scope of this Report, which will largely focus on research predicting caseloads. However, I summarize research on the effect of welfare benefit levels on single parenthood and the work effort of single mothers because American policy makers and citizens strongly suspect that welfare begets welfare. This research tries to estimate the work and marriage disincentive of means-tested programs. I also briefly summarize the effect of job training programs on welfare recipients' work effort. Since the 1960s America's social welfare policies have emphasized acquisition of human capital and have included explicit work and training requirements.

Figure 11 also shows that both exogenous and endogenous demographic characteristics affect program parameters. For example, as the population in the United States ages the costs of providing social security increase and more people are willing to make changes to the program. The large increase in single parenthood was partly responsible for the demise of the AFDC program. These changes in program parameters then feed back to the number of people who are eligible.

A.3 Economic Conditions. All else equal factors that make labor market work more attractive will increase work and decrease caseloads by decreasing the number of people who are income eligible. Thus a strong economy should reduce welfare caseloads. Researchers often use the unemployment rate to indicate the strength of the labor market. When unemployment rates

are low and wages increase, more people find that the benefits of labor market work out-weigh the benefits of the welfare package.

Figure 12 shows trends in the unemployment rate since 1965. The unemployment rate for females was above the rate for males until the early 1980s. Since then the unemployment rate for females has been about the same as or less than the rate for males. AFDC caseloads and the unemployment rate both increased in the early 1970s. But AFDC caseloads were fairly flat through the 1980s when the unemployment rate fluctuated a lot. Wages for women with less than a high school education or only a high school education declined between 1980 and 1997, but wages for men with the same education decreased even more (Waldfogel and Mayer 1999). Thus the labor market conditions for low-skilled women improved relative to low-skilled men, but declined absolutely between the early 1970s and the early 1990s. It is hard to predict what affect this might have on the marriage and work effort of such women. Economic conditions can increase the attractiveness of marriage if working men are more attractive potential mates than unemployed men.³⁷ But good economic times can also increase women's labor market opportunities, increasing their independence from both welfare and men.

A.4 Social Norms and Values. Norms and values affect the desirability of single parenthood, the social acceptance of labor force participation among mothers, fertility and other demographic characteristics that can also affect caseloads. However, we have little empirical evidence about how norms and values influence these behaviors, so we have little idea of their effect on caseloads relative to other factors.

Norms and values also affect the stigma associated with program participation. Welfare stigma can reduce the inclination of eligible families to participate in welfare programs. Some research does try to estimate the effect of stigma on whether eligible families actually participate in programs, but stigma is defined as the residual after other factors are controlled. Sometimes the political regime (net of current program parameters) in a state is taken to partly indicate sympathy or hostility towards welfare receipt.

Norms and values can also affect program parameters. For example, the increasing social approval for working mothers clearly encouraged legislators to pass increasingly aggressive work rules for welfare recipients. Norms and values can also affect many aspects of program

³⁷ See Wilson (1987), Mare and Winship (1991) and Jencks (1992) for discussions of the hypothesis that the labor market participation of men affects marriage rates.

implementation in ways that are seldom measured. For example, when there is a lot of social hostility towards welfare recipients, caseworkers might treat potential recipients in ways that discourage their participation in welfare programs. On the other hand, in the early 1970s caseworkers were not at all aggressive in sanctioning AFDC recipients who failed to seek work because there was still considerable ambiguity about whether mothers of young children should work.

A.5 Take-Up Rate. It is well-known that not everyone who is eligible for welfare programs participate in them. For example, studies suggest that in the mid-1970s the percent of the eligible population who participated was about 69 percent in AFDC (Fraker and Moffitt 1988), 40 percent in the FSP (Fraker and Moffitt 1988, Coe 1985), and between 45 and 60 percent in SSI (Fraker and Moffitt 1988, Coe 1985). The number of eligibles who decide to participate in a program clearly affects caseloads. Both federal and state program rules can affect the participation rate among eligible individuals and families by raising or lowering the transaction costs associated with participation and by raising or lowering the benefits of the program. So when benefits are high and easy to get, we expect participation among eligibles to be high. When benefits are low and hard to get, we expect participation to be low.

III. Explaining the Trend in AFDC Caseloads

Researchers have used two basic classes of models to explain trends in welfare program caseloads. One set of models uses individual-level data to estimate the effect of economic, demographic, and program variables on a person's or family's probability of program participation. Some of these use cross-sectional data in which state variation in program parameters and other factors are used to identify welfare effects. Some also pool cross-sections across years, so variation in welfare parameters and other factors come from variation over time as well as variation across states. These studies generally estimate the effect of a set of individual or family characteristics (X_i') and a set of state-level factors (S_{st}') on a binary variable indicating welfare participation (P_i) as follows:

$$prob(P_{ist}) = \alpha + \beta_x X_i' + \beta_s S_{st}' + \epsilon_i \quad (2)$$

The second set of models tries to predict state or national caseloads from aggregate pooled cross-sectional data. These generally try to estimate an aggregate version of equations 2.

$$C_{st} = \alpha + \beta_x \overline{X}_i + \beta_s S_{st}' + \epsilon_s \quad (3)$$

In principle if the first set of models were correctly specified one could aggregate the effects from individual-level models to arrive at the same conclusions about what factors affect state caseloads as those drawn from individual-level models. In practice these two sets of models are usually not comparable. The marginal effects on individuals estimated in a cross-section are likely to differ from aggregate effects estimated over time because the relationship among variables often changes over time. Relatively small effects might also be more precisely estimated in aggregate models when the sample of individuals is relatively small, as is often the case.

Other studies apply a model similar to equation 2 to panel data to try to predict changes in welfare use over time for individual women from changes in their earnings or marital status or changes in program parameters. For example, they try to estimate the effect of welfare parameters on a woman's probability of entering AFDC, exiting AFDC, or length of AFDC receipt. These studies of "welfare dynamics" are less useful for understanding trends in welfare caseloads because studies of caseloads necessarily concatenate these processes.

I organize the review of caseload research around the four left side variables in Figure 11. I then briefly discuss the research on welfare dynamics. Two other research traditions are related to research on caseloads. One tries to predict the probability of employment for single mothers from welfare program parameters and labor market conditions. Another tries to predict the probability that a mother is married from similar models. In the next section I argue that contrary to popular belief these studies are not especially valuable for understanding caseload trends. Nonetheless, because these studies represent a large part of the research literature often used to understand shifts in caseloads I review the major findings from this literature before turning to research specifically on caseloads.

A. Research on Work and Marriage Disincentives.

Much of the research predicting work effort and marriage has been motivated by an attempt to understand the disincentive effects of welfare programs, mainly AFDC. Put another way it tries to estimate the effect of the factors on the left side of Figure 11 on endogenous

demographic characteristics. These studies try to estimate the probability that a single mother i will work from the local labor market conditions (L_s) and welfare program parameters in the state (W_s):

$$\text{prob}(\text{work}_{is}) = \beta_0 + \beta_L L_s + \beta_w W_s + \varepsilon_i \quad (4)$$

Others try to predict the probability of marriage conditional on having a child on local labor market conditions, welfare parameters and, usually some information on characteristics of potential mate (M_i) for the woman.

$$\text{prob}(\text{marriage}_{is} | \text{child}) = \beta_0 + \beta_L L_i + \beta_w W_s + \beta_m M_i + \varepsilon_i \quad (5)$$

These studies are useful for predicting two important determinants of eligibility, namely the work effort of single mothers and the marriage probabilities of women with children. But as Figure 11 demonstrates many factors other than work and marriage can affect caseloads. Put another way, research on work or marriage disincentives predicts only two of many possible endogenous demographic characteristics and endogenous demographic characteristics are only one of the two variables in equation 1 that determine caseload size (the other is take-up rates). This would not be a problem if take-up rates were the same for those who remain eligible because they do not work or marry and those who do work or marry. In that case T in equation 1 would be constant, so if we knew how work effort affected eligibility we would also know how caseloads change. But as we will see take-up rates vary by the same factors that predict work and marriage. Recipients who are the least likely to find a job or a husband have the highest take-up rate. Thus if a program change reduces the number of single mothers who are eligible for AFDC/TANF by X , it is likely to reduce the caseloads by some (unknown) fraction of X .

Furthermore individuals can in principle both work and receive welfare benefits. Thus some proportion of those who work remain eligible for benefits. The proportion of single mothers who both work and receive welfare has varied from a high of 16.5 percent in 1974 to a low of 8.1 percent in 1984. It is also in principle possible for married couples to receive welfare, though few do. Thus a woman's probability of participation in welfare (P_i) in state s is a function of her probability of work, her probability of remaining eligible when she does work and her probability of taking welfare if she remains eligible:

$$\text{prob}(P_{is}) = \text{prob}(\text{work}_{is}) * \text{prob}(E_{is}) * \text{prob}(T_{is}) \quad (6)$$

To then estimate the effect of a change in work probability on caseloads we would have to sum across individuals. The research on work disincentives estimates only the effect of welfare

parameters on the probability of work (or hours of work), so it can tell us a limited amount about the effect of welfare parameters on caseloads. An analogous argument can be made about research on marriage.

Furthermore few studies try to jointly predict work. Imagine that a change in a program parameter, which I will call A, increases the likelihood of marriage and decreases the likelihood of work (for example A could implement a high tax on a single earner and no tax on a married earner). A study that ignores the effect of A on marriage but finds that it reduces work effort among single mothers, might be taken as evidence that implementing A would increase caseloads when in fact implementing A could leave caseloads unchanged or even increase them. Thus while research on work and marriage disincentives is useful for understanding how program parameters and other factors predict some important determinants of eligibility, it is not ideal for understanding changes in caseloads. Nonetheless I summarize the major findings from that research because it addresses the important question of whether welfare itself might increase caseloads by causing the behaviors that lead to poverty and welfare dependency.

Instead of summarizing the large number of individual studies on this topic, I summarize the major summaries of the research. There are four major summaries of these two research traditions (Danziger et al. 1981 and 1982, Moffitt 1992, and Hoynes 1997). I begin by summarizing these reviews. I then describe a few more recent studies.

Researchers have used two techniques to estimate the effect of AFDC on work effort and marriage probabilities. One approach is to compare trends in the number of single mothers or trends in the hours worked by single mothers to trends in AFDC program parameters, mainly the benefit level. Because other things that affect single parenthood and labor market work also change over time, we cannot be certain that trends in AFDC program parameters cause the observed trends in single parenthood or work effort among single mothers. Nonetheless, comparing trends provides prima facia evidence about the effect of welfare on work and marriage. The second technique is to econometrically estimate the effect of program parameters on work or marriage using differences over time or across states to identify program effects.

A.1 Work Disincentives. The proportion of single mothers who work has hardly changed over time. The proportion of single mothers aged nineteen to forty-four (the age range in which they are likely to qualify for AFDC) who worked was 74.3 percent in 1967, 72.2 percent in 1973 when AFDC benefits reached their highest level, and 75.9 percent in 1990 when

welfare benefits had lost nearly half their value (Meyer and Rosenbaum, 1999a).³⁸ The number of hours that single mothers worked fell over the late 1960s and early 1970s when AFDC benefits increased and rose slightly in the mid-1970 when benefits decreased. But hours of work among single mothers leveled off in the 1980s as AFDC benefits continued to decline (Moffitt 1992). Moffitt (1992) notes the most striking feature of the trends in work effort among single mothers is their stability over time despite rather large changes in AFDC benefits and the benefit reduction rate. Thus the evidence from trends does not support the notion that the generosity of welfare is likely to have a large effect on the employment of single mothers.

A second set of studies tries to estimate the effect of AFDC benefit levels and benefit reduction rates on the labor force participation of female headed families econometrically using cross-sectional or time-series state variation in the AFDC program. These studies find that higher AFDC benefits are associated with less labor market work among single mothers, but the range of the estimated effect is large. Danziger et al. (1981) estimated that the reduction in work effort in several studies ranged from 1 hour to 9.8 hours of work per week corresponding to 10 to 50 percent of labor supply levels. Because AFDC recipients worked on average 9 hours per week this implies that they would have worked between 10 and 19 hours in the absence of AFDC. These studies also imply that the work disincentive of AFDC probably has little effect on caseloads. Few single mothers reduce work effort to become eligible for AFDC, and even if eligible women increased their work effort in the estimated range, they would mostly have retained eligibility for AFDC (although their benefits would presumably decline).

Most of these studies estimate work effort from variation in AFDC benefit levels and not from variation in the total benefit package. A few take into account the combined value of AFDC and food stamps. Historically, Medicaid benefits were closely tied to receipt of AFDC. Thus the disincentives associated with AFDC may be at least partly a proxy for the disincentive effect of Medicaid. Moffitt and Wolfe (1992) calculate the insurance value of Medicaid for families based on the health status of their members. They find that once the insurance value of Medicaid is controlled the state AFDC benefit level has no effect on single mothers' labor supply. As Moffitt and Wolfe note, this should not be surprising because in their sample the estimated

³⁸ As noted the number of single mothers who both work and receive welfare has changed over time. If the number of single mothers who work has remained fairly constant, it must be the case that what has changed is their ability to combine welfare with work. This in turn depends on program rules, wage rates, and hours worked.

annual medical expenditure of families on AFDC is \$4229 (in 1990 dollars) while the mean annual combined food stamp and AFDC transfer was \$5912. So Medicaid transfers to families are large relative to other programs and therefore could be expected to have a large behavioral effect. These results imply that most if not all the labor supply effect of welfare is due to families' desire for medical insurance. Put another way, it implies that single mothers might be more likely to work if they did not have to give up their health insurance when they took a job. This was the assumption behind the changes to Medicaid during the 1980s and 1990s that decoupled Medicaid eligibility from AFDC eligibility and made higher income children eligible for Medicaid.

The main methodological problem faced by research on the work disincentives of AFDC is the problem of selection bias. Women who participate in AFDC have lower hours of work than those who do not participate. But they would probably have lower hours of work even in the absence of welfare. The main technique that researchers have used to overcome the problem of selection bias is to control characteristics of women expected to affect their labor supply or to stratify the sample on these characteristics. A few studies jointly estimate participation and labor supply equations (Fraker and Moffitt 1988).

This research may over-state the work disincentive of AFDC. Recent ethnographic research by Edin and Lein (1997) finds that most single mothers on welfare supplement their income through unreported work. This work is unreported because women would lose some of their benefits if they reported their earnings. But the work is also often irregular and sometimes illegal.

A.2 Marriage Disincentives.³⁹ Female headship increased both during the 1960s and 1970s when the total welfare benefit package increased. But female headship continued to increase in the 1980s and 1990s when welfare benefits were flat or decreasing. Thus trend data do not support the hypothesis that AFDC benefits provide a strong disincentive to marry.

Econometric models of the marriage disincentive generally try to estimate the effect of AFDC benefit levels and other program parameters on single parenthood holding constant labor market conditions. The results from such studies done in the 1970s are so mixed that few conclusions can be drawn from them. In a review of this research Groeneveld et al. (1983) found

³⁹ For reviews of the research on the effect of AFDC benefit levels on household composition see Groeneveld et al. (1983) and Moffitt (1992).

that in over half the studies welfare benefit levels had either no effect on marriage or that higher benefits decreased single parenthood. In the studies that did find that higher benefits increased single parenthood, the effects were generally small in magnitude or weak in statistical significance.

These early studies had several short-comings. First, many single mothers in a state may have become single mothers under different benefit circumstances, and few of these studies try to model lags in program parameters. Second, these studies largely ignored the possibility that state variations in religion, culture, and other factors could affect both marriage rates and AFDC benefit levels. Few studies used state fixed-effects or other techniques to control relevant unmeasured state characteristics.

Studies from the 1980s provide more consistent evidence that AFDC benefit levels increase single motherhood, but the estimated effect is generally small. One of the best known studies of the effect of AFDC benefit levels on single parenthood is Ellwood and Bane (1985) and the extensions by Ellwood (1986). They used a variety of data sources to compare rates of female headship in states with different AFDC benefit levels controlling numerous state characteristics. They also use a variety of techniques to control unmeasured differences across states likely to affect both AFDC benefit levels and probability of single parenthood. They estimated the effect of a change in benefit levels in a state on the change in the rate of single parenthood in the state, thereby holding constant all invariant state characteristics such as culture and climate. They compared the divorce rate among couples with and without children in high and low-benefit states. The assumption of this technique was that because AFDC is a program only for families with children it should not affect the decisions of childless couples. Finally they compared divorce or non-marital births among women who were likely to get AFDC and those who are unlikely to get AFDC (based on their individual characteristics). Ellwood and Bane found no statistically significant relationship between benefit levels and births to young, never-married women or first births to women of any age.

Robert Moffitt (1990) estimated the effect of the combined benefits from AFDC, food stamps, and Medicaid on marital status of both men and women using CPS data for 1969, 1977, and 1985. Pooling data for all three years and controlling women's age and education, the Census region in which she lived, and whether she lived in a metropolitan area, the amount of

the total welfare package had only a small and statistically insignificant effect on the probability of marriage among either black or white women. Moffitt's results did however show that a \$100 increase in the cash transfer from AFDC had a smaller effect on marriage probabilities than a \$100 increase in the total benefit package. This implies that the benefits from food stamps and Medicaid have a greater effect on single parenthood than the cash transfer. Moffitt concludes that the decision to marry is influenced more by the availability of health insurance than by the cash transfer. Single mothers may remain single in part to assure that their children get health insurance. This is consistent with the research on the work disincentive of AFDC.

In 1992 Moffitt published a review of the research on the marriage disincentive of welfare in which he concluded that there was little evidence of a marriage disincentive. After Moffitt's (1992) review, most people thought that at most the effects of welfare benefit levels on single parenthood was small and that any observed effect was probably mostly attributable to the need for health insurance. Subsequent studies supported that view (Hoynes 1997). More recent research revisited this question and re-ignited the controversy. Following I describe a few studies that are representative of this new wave of research. Moffitt (1998) summarizes some of these as well studies as well as a few others.

Mayer (1997) used PSID data to estimate the effect of AFDC benefit levels on the difference in the probability that teenage girls raised in married couple families and children raised in single parent families had a baby.⁴⁰ Mayer made a similar comparison for the probability that girls raised in each kind of family would grow up to be a single parent. States differ not only in the welfare benefit level but also in many other ways. Children raised in married couple families seldom qualify for AFDC. If the other state characteristics affect all children in a state, but the welfare benefit level only affects children raised in single parent families, this comparison should provide a test of the effect of AFDC benefit levels on teenage childbearing and single parenthood. Mayer also estimates the effect of AFDC benefits in the

⁴⁰ Teenage childbearing is potentially important for AFDC caseloads because teen mothers are more likely to get welfare and to get it for longer periods of time than women who delay childbearing. Teen childbearing rates have fallen in the United States over nearly the entire period of AFDC's existence (it rose slightly in the late 1980s and early 1990s). Because the proportion of older mothers having children declined even more rapidly than the proportion of teenagers having babies over this period, the proportion of children born to teenage mothers increased. Several studies have looked at the effect of welfare on teen childbearing (Ellwood and Bane (1985), Plotnick (1990), and Haveman and Wolfe (1994). These studies found small and statistically insignificant effects of welfare parameters on teenage childbearing.

state in which a child grew-up. Thus she estimates the effect of the benefit level before a woman has a child. Mayer estimates that doubling AFDC benefits would increase the gap in teenage childbearing between children from married couple families and children from single parent families by 2.5 percentage points (or about 12 percent of the national teen childbearing rate). It would increase the gap in growing up to be a single parent between children raised in married couple and single parent families by about 8 percentage points (or about 18 percent of the national average). This suggests that AFDC benefit levels have a nontrivial effect on rates of single parenthood.

Using NLSY data, Mark Rosenzweig (1995) found that a one standard deviation decrease in AFDC benefits (37 percent) was associated with a decrease from 10.4 percent to 7 percent in the proportion of women under 22 years of age with a non-marital birth. The decline was from 17 percent to 9.6 percent for low-income women in the same age range. Rosenzweig's model differed from earlier research in that it included cohort and state fixed-effects and extensive controls for women's own characteristics. Cohort fixed-effects in principle control for changes in norms and values regarding unwed motherhood as well as changes in birth control technology and other factors that have changed over time.

Hoffman and Foster's (1998) replication using PSID data also finds that in some models AFDC benefit levels have a positive effect on the proportion of women with a non-marital birth. However they also find that Rosenzweig's results are not robust to changes in data and reasonable changes in the model. They also find that the effect of higher benefits is to reduce marital births (thereby increasing the proportion of women with no birth or a non-marital birth). But the model of welfare disincentives predicts that lower benefits should reduce non-marital births not marital births. Hoffman and Foster argue that because these effects are inconsistent with the underlying theory and because they are not robust, Rosenzweig's results should be interpreted cautiously.⁴¹

⁴¹ AFDC can also affect the living arrangements of a single mother, especially the likelihood that a teenage single mother lives with her parents. Higher welfare benefits allow more women to set up their own household, many people have suspected that welfare benefits encourages teenage mothers to move out of their parents' household and into one of their own. In fact TANF rules require teenage mothers to marry or live with an adult. Only a few studies try to estimate the effect of AFDC benefit levels on living arrangements. In the best-known study, Ellwood and Bane (1985) found that higher welfare benefits were associated with young single mothers living on their own. Ellwood and Bane's estimates suggest that a \$100 increase in benefits (in 1975 dollars, equal to about 15 percent of the median benefit level) could decrease the number of teenage mothers who live at home by 30 percent.

These later studies do a much better job of controlling unobserved state characteristics and modeling welfare effects. Thus they are probably more creditable than earlier studies showing smaller effects.

Taken together this research suggest that AFDC benefit levels may have had an important effect on single motherhood at least among women most likely to get welfare if they become single mothers. Benefit levels may also have affected the work effort of single mothers most likely to get welfare. However, AFDC benefit levels probably had at most a modest effect on the overall growth of single parenthood and on the overall work effort of single mothers. A substantial part of the disincentives that appear to result from AFDC benefit levels may actually be attributable to families' trying to keep health insurance. If AFDC or other welfare benefits modestly affect single parenthood and work effort of single mothers, they probably have at most a small effect on caseloads. Whether one thinks that the modest disincentives of welfare are a serious problem depends on one's view about how large the benefits from such programs are. Although we have rather a lot of diverse opinion on this point, we have relatively little direct evidence.⁴²

B. The Effect of Job Training on Work Effort

Since 1967 welfare recipients have been required to be engaged in work activities. These could include searching for work, training for work or actually working. Over the years the United States has had a variety of different programs aimed at getting welfare recipients to work. A few programs have tried to provide wage subsidies to employers or workers, a few are aimed at matching employers and workers, but the largest programs have been those that try to alter labor supply by training welfare recipients (or potential recipients) in an attempt to reduce welfare use.⁴³ The most well know of the latter programs are Work Incentive (WIN) program, Comprehensive Employment and Training Act (CETA), Job Training Partnership Act (JTPA) and Job Opportunity and Basic Skills (JOBS) programs.⁴⁴

⁴² The conclusions in this section regarding the effect of welfare on marriage are shared by Moffitt (1998) in his latest review of the evidence on this topic.

⁴³ See Bassi (1995) for a summary of different kinds of "active labor market" policies that have been tried and evaluated in the United States.

⁴⁴ CETA was largely implemented as a counter-cyclical employment program. It had a large public service employment component as well as a smaller component for training disadvantaged individuals including actual and

For three decades social scientists have evaluated these programs. Unlike research on other welfare programs much of this research has used experimental designs in which some eligible individuals are randomly assigned to participate in a program and others are assigned to a control group. Then the two groups are compared to determine the program effects.⁴⁵ These experimental studies have had a great deal of influence because the results are convincing and easy for policy makers and the public to understand.⁴⁶

These studies consistently find little or no employment gains or wage gains from participating in government sponsored training programs for men and youth.⁴⁷ Research is more encouraging for welfare-to-work programs that try to get women who are already on welfare into the labor market. The studies generally find that even modest help in job search increases employment and earnings among welfare recipients. They also find that welfare-to-work programs are generally cost effective. The programs tend to provide very modest help at a low cost and generate a somewhat less modest gain in employment and wages and decrease in welfare benefits. Typically income gains from participation in welfare-to-work programs is in the range of \$150 to \$600 per year (Blank 1997a). The highest estimated gain for any program was \$1,000 per year. Typically these gains are large enough to reduce the welfare benefits that families receive but not to get them off of welfare altogether. Therefore these programs have at most a modest impact on welfare caseloads.

This may not be surprising. First most welfare recipients have some work experience and most remain on welfare for only a short period of time. Half of those who leave do so because they have gotten a job. Thus for most welfare recipients, welfare operates somewhat like

potential welfare recipients. (See U.S. House of Representatives, 1998, page 1692 for information on job training programs for disadvantaged populations including CETA.)

⁴⁵ The Negative Income Tax Experiments sponsored by the federal government were an attempt to use random assignment to estimate the effect of various welfare program parameters on work and marriage. I do not review these studies here because the program designs that were evaluated were not particularly relevant to those that were actually implemented on a large scale, and because many of the experiments suffered from serious problems. See Groenveld et al. (1983) and Munnell (1987).

⁴⁶ Manski and Garfinkel (1992) provide an excellent review of methodological and statistical issues involved in evaluating welfare to work programs. Nathan (1988) also provides a discussion of issues related to random assignment evaluations of welfare-to-work and other policies.

⁴⁷ See Barnow (1987) for an early review of this research. See Gueron and Pauly for a review of evaluations of state welfare-to-work programs prior to 1989 (when JOBS programs were mandated). See also Lalonde (1995) for an up-dated review. An excellent discussion of welfare-to-work programs is provided in Friedlander and Burtless (1995).

unemployment insurance. For such women small amounts of job training are unlikely to make a big difference – they already have sufficient skill to be employed. But help in getting another job might pay off in reducing the period of unemployment. Welfare recipients with little work experience also tend to be young, have young children, and have little education. Help in getting initial work experience might help them quite a bit. But so might help with child care and basic skills.⁴⁸

C. Research on Caseloads.

Research using aggregate-level data to model the size of state caseloads is relatively recent and includes relatively few studies. Like research on the disincentives of welfare, studies of AFDC caseloads use variation over time and across states in the labor market and in AFDC program rules to predict caseloads.

C.1 Effect of AFDC Program Parameters and the Macro-Economy. Most of the recent research on caseloads tries to estimate the relative importance of changes in the AFDC program and changes in the economy on AFDC caseloads. This research was initially intended to explain the increase in AFDC caseloads between 1990 and 1993. But much of the research now tries to explain the decline in caseloads after 1993. Because economic conditions changed at the same time that Congress implemented changes to social welfare programs, a debate emerged over whether the change in caseload was the result of economic or program changes. Thus in this section I focus on these two factors together.

Between 1960 and 1973 AFDC benefit levels increased and the caseload grew. Between 1973 and 1987 the AFDC benefit per family declined but the number of recipients hardly changed. During this period food stamps and Medicaid became more generous, but still the total benefit package available to AFDC families including non-cash benefits declined after the mid-1970s. AFDC caseloads increased in the late 1980 and early 1990s even though welfare benefits continued to decline. Thus simple trend data do not suggest that benefit levels have much effect on caseloads. Of course many other things were happening during this time that could have affected the caseload.

⁴⁸ In fact some research suggests that job search programs have the greatest effect on the most and least disadvantaged welfare recipients (Blank 1997a).

Some studies have estimated the effect of economic conditions on state caseloads while ignoring the effect of changes in welfare policy (see Peskin et al. 1993). Economic and welfare program variables are likely to be correlated. For example, states with a high unemployment rate may also have low benefit levels. Thus such studies can tell us little about the causal effect of economic factors on caseloads. Several early studies try to predict changes in AFDC caseloads over time in only one state.⁴⁹ These studies obviously control all invariant state characteristics, but they seldom control all the state characteristics that change and might affect caseloads. Because some unmeasured changes in state characteristics are likely to be both correlated with the changes in the welfare program and changes in caseloads, these studies are likely to produce biased estimates of the effect of program parameters and labor market conditions on caseloads.

Other studies use data for several states but only a few years (Gabe 1992 and others). These studies seldom control state characteristics likely to be correlated with welfare program parameters, so they too provide little information about the cause of changes in AFDC caseloads.

A few studies try to estimate national AFDC caseloads from national aggregate data over time. Grossman (1985) does this, but in a second study she predicts state caseloads from pooled state cross-sectional data then sums the with-in state estimates to get a second national estimate. In the latter model she predicts the state quarterly number of persons receiving AFDC from 1974 to 1983 using state and year fixed-effects, a dummy variable for the 1981 OBRA, the state's standard of need for a family of three, the number of persons in the state who are unemployed (with four lags), and the number of female-headed households. She finds a relatively small R^2 for her model and a relatively weak effect of the standard of need on the size of caseloads. Her estimates using national data for predicting national caseload trends had a higher R^2 and generally predicted the trends in caseloads better than her state-level models aggregated to the national level.

Grossman's model has been criticized because using a dummy variable for OBRA constrains its effect to be the same in all states. Because states differ tremendously in size, the effect of implementing OBRA on the absolute level of level of caseloads is likely to differ across states. We might expect 1981 OBRA (and other program changes) to change caseloads by the

⁴⁹ In this section I review studies that try to estimate national trends in caseloads. I do not include studies that try to predict changes in caseloads in just one state. Studies that try to forecast state AFDC caseloads include Barnow (1988), Garasky (1989) and O'Neill (1990). Many states have their own models for predicting caseloads. Many of these are reviewed in the Lewin Group (1997).

same *percent* rather than by the same number across state. Later studies almost all use the log of caseloads as the dependent variable so that a unit change in an independent variable has the same percentage change on the dependent variable.⁵⁰ In addition, because the number of female-headed families is presumably somewhat endogenous, her estimates of the effect of program parameters might be downwardly biased.

A 1993 CBO report uses a model similar to Grossman's to predict quarterly national caseloads from 1972 to 1991. The independent variables include two program variables, namely the real AFDC benefit level and a dummy variable for 1981 and all subsequent years indicating that the 1981 OBRA was in effect. It also included two measures of economic conditions. The first is a measure of the "employment gap," which is intended to measure difference between the economy's potential and actual employment. Its construction depends on what most people now think of as highly tenuous assumptions about the natural rate of employment. However, it tracks the unemployment rate very closely. The second labor market variable is real earnings for women with a high school diploma. The model also includes lags for the employment gap and a measure of the rate of single motherhood.

The CBO study found that a 5 percent rise in AFDC benefits was associated with a 0.2 percent rise in caseloads. The 1981 OBRA appears to have lowered caseloads, mainly because it reduced eligibility for AFDC. Turning to the economic variables, the wage rate for women had little effect on caseloads. But the employment gap had a large effect. A 1 percent increase in the employment gap is associated with a .5 percent increase in AFDC-basic quarterly caseloads. The same increase in the employment gap actually increases the AFDC-UP caseload by 1.5 percent. A one-time increase in the gap also affects caseloads for several quarters.

A set of recent studies uses pooled cross-section time series data to estimate AFDC caseloads. These are described in Table 7. The model in these studies are similar to Grossman's model predicting state caseloads, but these studies all try to predict the natural log of the percent of the population receiving welfare in a state and year. The economic variable of interest in most studies is the state unemployment rate and the program variable is usually an indicator variable

⁵⁰ Most of the studies cited in this paper provide some review of the relevant research literature. The Lewin Group (1997) provides an especially rich review of research early aggregate level models of state caseloads and a good critique of methodological issues associated with estimating such models.

equal to 1 when the state has been granted a waiver (and thus has changed its welfare policy). The basic model is:

$$\ln R_{st} = \alpha + \beta_u U_{st} + \beta_w W_{st} + \beta_x X'_s + \gamma_s + \gamma_t + \varepsilon_{st} \quad (7)$$

where R is the share of the population receiving welfare, U is the unemployment rate, W is a dummy variable indicating whether the state has a waiver in effect in a year,⁵¹ X' is a set of other control variables, γ indicates a fixed effect, s indexes states and t indexes time.⁵² Year fixed-effects control time varying factors that affect all states, such as national changes in welfare policy or tax codes and presumably national changes in norms and values. State fixed-effects control all time-invariant factors within states, such as fixed cultural attributes of the state population and fixed aspects of the industrial composition. With both year dummies and states dummies a coefficient represents the effect of a change in the independent variable on the deviation from the state-specific trend in the per capita caseload. Put another way, this model estimates the effect of within-state changes in independent variables on changes in caseloads. The unemployment rate and AFDC waivers are expected to affect eligibility. Waivers can also in principle affect the take-up rate and X'_s can affect both eligibility and take-up. The use of a dummy variable for waivers presents some problems that I discuss below. Some of these studies also control demographic and other characteristics of states that might affect stigma. I discuss the effect of these factors below.

In most of the studies caseload data come from state administrative records. Data on unemployment rates and state demographic characteristics come from large nationally representative data sets such as the CPS or Census.

As Table 7 shows these studies generally find that economic variables have an important effect on caseloads. A 1-point rise in the unemployment rate results in a 3 percent to 5.9 percent rise in AFDC caseloads. The effect of waivers is more variable in these studies. Waivers appear to decrease caseloads by anywhere from 5.1 to 15 percent.

⁵¹ In all studies waivers are coded only after 1993. Before that year most waivers affected only a small number of recipients in a state. Most studies do not control other major program changes in states.

⁵² Because these studies use year by state data, the number of cases is the number of years times 51 (50 states plus the District of Columbia). Thus, for example, the CEA study uses data for 51 states over 21 years for a total of 1071 observations.

These studies also include many variations to the basic model in equation 1. The variations are intended to overcome several potential sources of error in the model and to resolve some of the discrepancies in the estimates.⁵³ One of the greatest discrepancies is between the results in Ziliak et al. (1997) and the other studies. Ziliak et al. find that economic factors explain much more of the change in caseloads than the other studies, and correspondingly that waivers explain much less of the change in caseloads. Figlio and Ziliak (1999) try to reconcile the difference between the Council of Economic Advisors (CEA) study and Ziliak et al. and Wallace and Blank (1999) try to reconcile the discrepancies between Blank (1997b) and Ziliak et al. Both studies do this by testing the sensitivity of the results to differences among the studies.

Unlike most of the other studies, Ziliak et al. use monthly rather than annual data on caseloads. But both Figlio and Ziliak and Wallace and Blank find that monthly and annual data provide very similar estimates of the effect of the unemployment rate on caseloads. The data in Figlio et al. covers a shorter time period than CEA or Blank. Figlio and Ziliak find that this does not account for the greater explanatory power of the unemployment rate in Ziliak et al. The CEA uses recipients per capita rather than cases per capita.⁵⁴ But results are not sensitive to this difference either.

Ziliak et al. did not include welfare benefits as a regressor in their models. They argued that while benefit levels might affect caseloads, the caseload size might also affect benefit levels. Since they had no instrument to account for this simultaneity, they omitted benefit levels all together. But omitting benefit levels did not affect Ziliak et al.'s conclusions, presumably because welfare benefit levels are not strongly correlated with the unemployment rate or whether a state had a waiver. Nor did weighting the state-level data by the state population affect the Ziliak et al. results. Whether the model tries to explain levels of caseloads or changes in caseloads also accounts for little of the difference in the results.

Figlio and Ziliak find that the main difference between Ziliak et al. and other studies is the way Ziliak et al. model dynamics. Most studies code waivers as equal to one in all years subsequent to the year in which the waiver was granted. But waivers may have effects before

⁵³ See Martini and Wiseman, 1997 for a critique of the CEA study, which raises many of these issues.

⁵⁴ A case usually includes several recipients since a case is usually a family.

they are granted if case workers and potential and actual recipients anticipate them. On the other hand, a significant amount of time sometimes passed between when a waiver was granted and when it was implemented. The CEA report experimented with including a variable equal to one in the year prior to a waiver being enacted and found that states averaged a 6.3 percent decline in caseloads in the year before a waiver was granted. Blank found the same thing. It is difficult to know what this means. Blank argues that a waiver could not have an effect on caseloads before it is implemented and therefore that the apparent effect of waivers is really due to things that were changing in states prior to their getting a waiver. Thus the waiver program per se may not affect caseloads.⁵⁵ But recipients or potential recipients may also change their behavior in anticipation of the waiver. For example, if it is well-known that a waiver requiring work or training is about to be implemented, some people will be more aggressive about getting or keeping work than they would have been if they did not anticipate the waiver. This result could also mean that states with a high probability of a caseload drop were more likely to receive waivers.

Because of these problems Figlio and Ziliak do not model lags in the implementation of waivers, but they do model state dependence in caseloads by including lags for caseload size as regressors. They also modeled delayed reactions to macro-economic changes by including several lags in the unemployment rate. The CEA report found that a one-year lag on the unemployment rate was a stronger predictor than the current unemployment rate of caseload levels, and that it reduced the effect of current year unemployment rates considerably.⁵⁶ Figlio and Ziliak found that controlling for caseload dynamics and the lagged unemployment rate reduced the effect of waivers on caseloads during the pre-TANF period. They estimate that using annual data on state caseloads and modeling first differences, the unemployment rate accounts for 30.7 percent of the decline in caseloads between 1993 and 1996, and waivers account for -5.7 percent of the decline (that is it increased caseloads). They argue that an

⁵⁵ One way to test for possible endogeneity is to use a measure of future caseloads rather than past caseloads as an independent variable. On the assumption that future outcomes cannot be true causal influences on contemporaneous outcomes, the coefficients on such variables can be interpreted as measuring persistent unobserved effects. (See Mayer 1997 for rationales for this approach.)

⁵⁶ The coefficient for the current year unemployment rate declined from .031 (standard error = .003) to -.009 (standard error = .004) when the previous year's unemployment rate was added to the model. Its coefficient was .045 (standard error = .004).

increase in caseloads due to waivers is not implausible if some waivers decrease caseloads (such as JOBS sanctions) and others increase them (such as higher earnings disregards).

Bartik and Eberts (1999) also find that their results are sensitive to the dynamic specification of the dependent variable. The effect of the unemployment rate is largest with no lags in caseloads (a one point increase in unemployment increased caseloads by 6 percent) and smallest when the dependent variable is the change in caseloads (a one point increase in unemployment increased caseloads by 1.3 percent).

Bartik and Eberts also argue that most other research on caseloads uses a fairly weak measure of the macro-economy, namely the unemployment rate. Using a weak measure of the macro-economy would presumably downwardly bias its estimated effect and possibly bias the estimated effect of other variables in the model as well. To overcome this potential problem, they include three variables, in addition to the state unemployment rate, which are intended to measure the structure of the labor market. These include state employment growth, the state average wage premium, the extent to which state industries are likely to hire people without a high school degree, and the extent to which they are likely to hire welfare recipients. Bartik and Eberts find that the increase in caseloads in the late 1980s was due largely to a decrease in demand for low skilled workers. The correlation between the unemployment rate and these other measures is not extremely high. For example, the correlation between the unemployment rate and employment growth is $-.538$, so it is possible that states can experience unemployment even with employment growth and vice versa. But these additional labor force variables do not do better than the unemployment rate alone at explaining the recent decline in caseloads.

One potential problem with several of these studies is that an indicator variable for welfare waivers is a weak measure of welfare changes and therefore may produce a downwardly biased estimate of the effect of welfare changes on caseloads. Blank and the CEA study modeled the effect of different types of waivers, as did Figlio and Ziliak in their attempt to reconcile differences among studies. Not only did modeling different kinds of waivers not reconcile these differences, but the results regarding the importance of difference kinds of waivers are inconsistent, raising questions about the meaning of the effect of waivers in these models.

The CEA study found that only waivers that provided sanctions for failing to meet the requirements of the JOBS program had a statistically significant effect (at the .05 level) on

caseloads. Using the same model as the CEA report but omitting data for 1977 and 1996, Moffitt (1999) finds that the effect of waivers that implemented “family caps” and waivers that implemented work requirements were statistically significant, but those that implemented sanctions in the JOBS program were not.⁵⁷ Since waivers were not coded prior to 1993, the difference in the CEA estimates and his is entirely due to omitting 1996 data. Moffitt argues that the sensitivity of the effect for different kinds of waivers to the years selected raises suspicion that these variables are not measuring the effects of the separate waivers.

Blank (1997b) also raises doubts about the meaning of the effect of waivers. She found that the strongest effect among the different kinds of waivers was for waivers that implemented a family cap. Implementation of a family cap was associated with an 18 percent reduction in the AFDC caseload. Blank argues that this effect is too large to be realistic. A family cap is not likely to affect caseloads in the short-run because it holds constant the benefit level for women on the program who has a additional child, but it does not reduce benefits or remove families from the rolls.⁵⁸ Blank takes the apparent effect of family cap waivers as evidence that the estimated effect of waivers is really due to other changes that took place in the state around the same time as waivers were implemented.

These models tend not to explain much of the change in caseloads. For example, Blank’s model predicts a decline in caseloads between 1979 and 1986 when caseloads remained constant. Between 1987 and 1995 when caseloads rose, the model predicted a decline. But Blank finds that her model predicts some changes in AFDC caseloads better than others. Beginning in the early 1980s, child-only cases increased relative to other kinds of AFDC cases.⁵⁹ When Blank re-estimates her model eliminating child-only cases, she find that it explains a large part of the trend in caseloads. In fact, Blank finds that her model predicts changes in AFDC-UP caseloads rather well, AFDC-Basic caseloads moderately well, and child only case loads hardly at all. It is

⁵⁷ Family caps mean that welfare recipients do not get an increase in AFDC benefits when they have an additional child. Before waivers allowing family caps were implemented benefit levels in all states depended on family size, though the increase in benefits when a woman had an addition child varied greatly across states.

⁵⁸ As Blank notes, a study of the family cap in New Jersey, the first state to implement the policy, found that AFDC use fell as much for those subject to the cap and for those in a control group not subject to it.

⁵⁹ Child-only cases are cases in which a child but no adults in the household receives AFDC benefits. These cases are usually children in foster care. Foster care increased greatly during the 1980s. The reasons are not completely understood, but many people attribute at least part of the increase to the epidemic of crack cocaine use that occurred in many big cities.

perhaps not surprising that a model that relies on labor market variables and AFDC waivers, many of which were aimed at encouraging labor market work, explains changes for two-parent families well and changes for children hardly at all. Two-parent families respond to the business cycle, but as discussed above, the labor force participation of single mother is fairly unresponsive to the business cycle or to program variables. Child-only cases would not be expected to respond much to changes in the economy or to the kind of waivers that were implemented.

One important question for policy-makers is whether the effects of the macro-economy and AFDC/TANF program parameters have changed over time. Blank (1997) shows separate results for 1977-1985 and 1986-1995. She finds that although some factors are bigger in one time period than another, the model is basically robust to different time periods. However, Moffitt (1999) estimates a model using variation in state unemployment rates for 1977 to 1980 before the early 1980's recession and recovery; 1981 to 1986, which includes a full business cycle; and 1987 to 92 which covers a weak recession and recovery. He finds that the cyclical sensitivity of the AFDC caseload has risen over time. In the first period a one-point increase in the unemployment rate was associated with a 1.6 percent increase in AFDC caseloads. In the second period the same change was associated with a 2.3 percent increase in caseloads, and by the third period it was associated with a 3.9 percent increase.

In an earlier study Moffitt (1987) tried to predict the increase in the AFDC participation rate between 1967 and 1979. His approach was to assess the effect of a set of measurable economic and programs changes and to attribute the residual to social factors such as a change in attitudes or unmeasured program changes, such as the court-ordered changes that eliminated the main-in-the-house rule. He used CPS data to predict the probability that a female head of household will be on welfare using data from the 1967, 1973, and 1979 CPS. For each woman in each year he estimated the probability of participation from the state AFDC benefit level, the benefit reduction rate, and the unemployment rate in the woman's state; her education, age, race and income from other sources; the number of children she had; and her region of residence. The effects of these variables were in the expected direction: higher benefits and high unemployment rates are associated with a greater probability of participation. More highly educated women, older women and women with alternative sources of income are less likely to participate. But three things stand out in these models. First, little of the increase in caseloads over this period

could be explained by the economic or demographic factors that affected participation rates. Second, the statistical significance of most variables declined over time even though the sample sizes increased. Third, the intercept grew, meaning that there was a significant upward shift in participation propensities between 1967 and 1973 unaccounted for by the variables in the model. Moffitt concluded that the increase in participation was due both to program changes other than changes in the benefit reduction rate and benefit levels and to a decline in stigma associated with participation.⁶⁰

Bavier (1999) in a model discussed below also finds changes over time. His model predicts changes in the caseload between 1967 and 1993 fairly well, but it predicts a much smaller decline in caseloads than the observed decline after 1993. The effect of the employment rate on caseloads between 1993 and 1995 was similar to the effect in previous years. But after 1995 caseloads declined faster than the pre-1995 coefficient predicted.

One problem with aggregate data like that used in all these studies is that it does not permit analysis of sub-groups with different propensities for welfare use. One important hypothesis about the recent welfare reforms is that in response to those reforms the most advantaged welfare recipients will leave the rolls first leaving behind the most disadvantaged families who will then be more difficult to get into the labor market. An alternative hypothesis is that the least advantaged welfare recipients are the least likely to be able to comply with work requirements and are therefore the most likely to have left the rolls because they were sanctioned or otherwise encouraged to leave the rolls. Moffitt (1999) estimates the same model as the CEA report. But instead of predicting administrative counts of AFDC recipients he uses CPS data to predict the proportion of female residents aged 16 to 54 years in a state who receive AFDC. By using individual data Moffitt can disaggregate the caseloads into age and education subgroups for each state to see whether changes in welfare policy and economic conditions affect women with different characteristics differently.⁶¹ He finds that waivers had the greatest effect on women with less than 12 years of schooling. A waiver reduced AFDC participation in this group by 1.7 percentage points. It also increased the work effort of this group more than others. This

⁶⁰ See also Moffitt (1983) and Ruggles and Michael (1987).

⁶¹ For each state Moffitt created a matrix of respondents classified by four age groups and four education groups. This resulted in a sixteen-cell matrix of probabilities of welfare receipt for each state. Thus the analysis still used grouped data.

supports the second hypothesis. But these women experienced no significant increase in earnings or wages.

As I have noted not all these studies include a measure of AFDC benefit levels. But some do and they all find that an increase in benefit levels increases caseloads. For example, the Lewin Group (1997) finds that a 10 percent increase in real AFDC benefits for a family of three (from say \$400 to \$440) increases the AFDC basic caseload by 2.7 percent and the AFDC-UP caseload by 2.6 percent.

All these studies find that economic conditions have played an important role in the decline in caseloads since 1993. For example, Wallace and Blank conclude that, “The on-going decline in unemployment rates can explain about 8 to 19 percent of the AFDC caseloads since 1994... The expected effect of any future one-point increase in unemployment will be to increase TANF caseloads by 4 to 6 percent ...” However the extent to which the economy explains the decline seems to depend on how changes in caseloads are modeled. All studies except Figlio and Zilliak and Zilliak et al. find that waivers were an important predictor of the decline in caseloads since 1993. In most studies models that include program parameters and economic variables explain the run-up in caseloads between 1988 and 1993 better than the decline since 1993.

C.2 Changes in Other Programs. As discussed above changes to programs other than AFDC could affect AFDC caseloads. There is surprisingly little research on the interactions between programs. For example, I know of no research to date that has tried to estimate the effect of the growth in the EITC on welfare caseloads. A growing research literature considers the effect of the EITC on work and marriage, but just like the research on the effect of AFDC on work and marriage it can tell us only a limited amount about the effect of the EITC on AFDC caseloads.⁶²

The EITC has almost certainly increased labor market work of single mothers. However, the magnitude of the effect is unclear. Research on the effect of the EITC largely relies on descriptive evidence about changes in labor force participation among those who the EITC is likely to affect and those it is unlikely to affect. For example, most recipients of the EITC are single mothers, so researchers compare the trend in work for single mothers to the trend for

⁶² For recent research on the effect of the EITC and other programs on the work effort of single mothers see Eissa and Leibman (1996), Meyer and Rosenbaum (1999a, 1999b) and Ellwood (1999). For research on the effect of the EITC on single parenthood see Ellwood (1999) and Holtzblatt and Rebelein (1999).

married mothers or to the trend for childless single women (two groups largely unaffected by the EITC). Meyer and Rosenbaum find that weekly employment increased by almost six percentage points for single mothers between 1984 and 1996, but declined nearly one point for single women without children.⁶³ In addition work among single mothers increased more in states with a low cost of living than states with a high cost of living. Because a given dollar of EITC transfer has more purchasing power in a low cost of living state, this can be taken as evidence that the EITC encourages work. Finally there is weak evidence that work among single mothers increased more in states that have a state EITC than in states without a state EITC. How much this increase in work by single mothers has affected welfare caseloads is unknown. But it is likely that the effect of the EITC, especially combined with the work requirements of TANF have contributed substantially to the decline in AFDC/TANF caseloads since 1993.

On the other hand the EITC probably had little effect on marriage rates for women with children. The EITC has complex potential effects on marriage. Given the structure of the tax, the EITC provides single mothers who do not work an incentive to marry someone who does work (because the couple will qualify for the EITC). If the tax compensates for the extra cost of a wife and child the man also has an incentive to marry. But single mothers who work can incur a penalty when they marry someone who also works if the marriage increases family income above the phase out range of the tax. Ellwood (1999) concludes that there has been no discernible increase in marriage or cohabitation among low-skilled women as a result of welfare reform or changes in the EITC.

Several studies have found that access to Medicaid was an important determinant of participation in AFDC. Blank (1989) using 1980 data from the National Medical Care Utilization and Expenditure Survey finds that health problems increase AFDC participation. Since Medicaid is presumably more valuable to families in which a member has health problem, this suggests that some families retain AFDC in order to retain Medicaid. But neither the Medically Needy program nor the state mean insurance value of Medicaid had significant effects on AFDC participation. This is consistent with Mauskopf et al. (1985) who also found little effect of the Medically Needy Program on state AFDC caseloads. Winkler (1991) finds similar

⁶³ It is in fact possible that the changes to the EITC and other policy changes that try to get single mothers to work could crowd out work by others including married mothers or single women without children. I have seen no research on this question.

results. The Lewin Group (1997) also found only a small and statistically insignificant effect of the Medicaid expansions during the 1980s on AFDC caseloads. Nor did estimated changes in the value of Medicaid benefits have an effect that was reliably different from zero.

Moffitt and Wolfe (1992) use 1984 and 1986 SIPP data to estimate the effect of expected medical expenditures on AFDC participation. They control several state characteristics including the wage rates, the AFDC guarantee level, and food stamp guarantee level. They also control characteristics of individuals including the availability of private insurance, age, race, education, health status, and family size and composition. Expected Medicaid benefits are calculated from the health status of family members. They find that higher expected Medicaid benefits are associated with increased AFDC participation. Their results suggest that if all single women got health insurance when they worked, AFDC caseloads would decline by 10.7 percent. Thus when the insurance value of Medicaid is high (or put another way the health of recipients is low) families will alter their behavior to keep Medicaid eligibility, which until recently implied keeping AFDC eligibility. An important difference between Moffitt and Wolfe and Blank (1989) and Winkler (1991) is that Moffitt and Wolfe use the insurance value of Medicaid estimated for individual families while the other studies use state mean insurance values.

Yellowitz (1993) pooled individual-level data from the CPS for 1989 to 1992 to estimate the effect of the increase in the availability of Medicaid on AFDC participation and work effort of single mothers. He argues that the changes in Medicaid amounted to changing the income limit for eligibility. He calculates the income limit for Medicaid as a percentage of the poverty line. He then calculates the gain in Medicaid accessibility for families by calculating the impact of Medicaid expansion for individual children. Some children were not affected by the expansion either because they were too old to qualify for the change or because the child was already covered. For example, children in high AFDC benefit states gained less from the Medicaid expansion because their income limit for AFDC was higher than in low benefit states. He then estimates the effect of the gain in eligibility on AFDC participation. He finds that increasing the income limit for Medicaid resulted in a decrease in AFDC participation and an increase in labor force participation among single women. His estimates suggest that the fully phased in expansions resulted in a 3.5 percent decline in AFDC caseloads.

The Lewin Group (1997) found suggestive evidence that when eligibility rules for SSI were tightened in 1977-78, AFDC caseloads increased in response. But they caution that this finding is not robust.

C.3 Effect of Demographic Characteristics. Several studies consider the effect of the proportion of state residents who are single mothers on welfare caseloads. In Figure 11 single parenthood is an endogenous demographic characteristic, and therefore partly caused by changes in the economy, welfare program parameters, and other factors, so it may not be appropriate to control rates of single motherhood in a reduced form estimate of the effect of these factors on caseloads. Nonetheless is useful to see how much the increase in single parenthood has affected AFDC caseloads.

We expect that as the number of single mothers increases, AFDC caseloads would also increase because it is a program that almost entirely serves single mothers. However, the story is not likely to be so straightforward because the relationship between single motherhood and welfare caseloads depends on both the number of single mothers and the participation rate of single mothers. While the former has increased steadily since the 1960s (and before) the latter has fluctuated. In 1970 28.9 percent of single mothers received welfare. The proportion of single mothers receiving welfare reached a high of 35.2 percent in 1976. It then declined to 28.8 in 1980. It remained at about this level until 1993 when it began to decline again. The percent of single mothers receiving AFDC reached a low of 22.5 percent in 1996.⁶⁴ In addition, states vary in the percent of single mothers receiving welfare. Thus the correlation between the number of single mothers and the size of AFDC caseloads is likely to be far from 1.

Gabe (1992) attributes two-thirds of the rise in AFDC caseloads between 1987 and 1991 to the growth in families headed by a never-married mother. But he does not take into account the effect of changes in labor market conditions or welfare rules, so his estimates are almost surely exaggerated. Bavier (1999) uses CPS data to try to understand the decline in AFDC caseloads since 1993. He shows that the number of persons living in families with children declined by 37 percent between March 1993 and March 1998. But the number of persons in female-headed families with children did not change. Nor did the share of female heads in

⁶⁴ From Meyer and Rosenbaum (1999a) Table 2.

unrelated sub-families or the percent living with unrelated individuals.⁶⁵ Thus the decline in AFDC caseloads could not be accounted for by a decline in single parent families. Instead, as noted above, the percent of such families receiving AFDC declined.

Blank (1997b) finds small and statistically insignificant effects of the change in the state percent of families headed by females on changes in AFDC caseloads between 1977 and 1995. The Lewin Group (1997) estimates that the decline in marriage and the increase in non-marital births increased AFDC basic caseloads by .5 percentage points annually between 1980 and 1994, which is about a quarter of the total average annual growth in caseloads.

Blank also estimates the effect of other demographic characteristics on AFDC-Basic caseloads. She finds little effect of the percent of state residents who are immigrants, recent immigrants, black, Hispanic, or elderly on changes in caseloads, partly because these demographic factors did not change much within states over her period of observation. Blank shows that about 45 percent of caseload fluctuations can be explained by changes in the number of child-only cases and the number of such cases can in turn be explained by some demographic factors. Both the percent of the state population that is black and the percent that is recent immigrants have large and statistically significant effects on the size of the child-only caseload. Black children are much more likely than other children to be placed in foster care. Children of recent immigrants often qualify for AFDC benefits when their parents do not, and thus become child-only cases.

The Lewin Group finds that legalization of illegal immigrants under the 1986 Immigration Reform and Control Act (IRCA) contributed to the growth in child-only AFDC cases between 1988 and 1993. Immigrants whose presence in the United States was legalized by IRCA were not eligible for AFDC benefits for a five-year waiting period. Their children who were born in the United States had always been eligible, but many parents did not sign their children up probably for fear of deportation. Once they were legalized, they took advantage of the AFDC program.

⁶⁵ One potential problem with studies that use CPS time series data is that under-reporting of program participation seems to have increased (Bavier 1999). From 1987 to 1991 CPS estimates of the number of families with children receiving welfare was about 80 percent of the number derived from administrative record. After 1991 this declined to about 75 percent and by 1997 it was only 64 percent. The increase in under-reporting is a serious problem for estimating participation rates as well as caseload levels over long periods. Although no one knows why under-reporting of welfare participation increased, the political climate became less favorable towards welfare recipients and likely increased stigma.

C.4 Norms and Values. Few studies try to estimate the effect of changes in norms and values on AFDC caseloads. Blank (1997b) and Wallace and Blank (1999) estimates the importance of several political variables on caseloads including the political party identification of the governor of the state and which political party controls the state House and Senate. These might be interpreted as having effects through norms and values because political parties with more liberal attitudes towards welfare may create a political climate in which families feel like they can ask for help and state civil servants see their job as helping recipients rather than discouraging them from taking welfare. Of course, more liberal regimes may also implement more liberal AFDC policies, but these studies try to control some of these. They find that Democratic governors and representatives are associated with higher caseloads and with a rise in caseloads.

Moffitt (1983) in a well-known study used 1976 PSID data to estimate the effect of welfare stigma on participation in AFDC. He reasons that there may be a “flat” component of stigma that is associated with whether an eligible individual would participate at all, and a “variable” component that is influenced by program parameters so that once people are on the program, changes in program parameters affect their probability of participation. For example, some people may have such negative feelings about welfare that they would not accept it. But others may accept welfare under the right circumstances. He finds that stigma affects the decision to go on welfare, but he finds little evidence for a variable component of stigma.

Other research suggests that a person’s probability of participating in welfare is influenced by the behavior of those with whom she interacts. A substantial research literature documents the intergenerational correlation of welfare use.⁶⁶ However, this correlation could result from several factors. First, poor children are more likely to grow up to be poor, so the correlation could just result from shared economic circumstances. It could also arise if families who get welfare have less distaste for welfare (and perhaps more distaste for work). Finally it could arise if families who get welfare transmit information about getting welfare that lowers the transaction costs of participating. Gottschalk (1992) using NLSY data finds that among individuals *eligible* for welfare, those who grew up in families that received welfare were more likely to receive it themselves than those who grew up in families that did not receive welfare.

⁶⁶ See for example, Duncan et al. (1988), Gottschalk et al. (1994), and Moffitt (1992).

This suggests that at least some of the intergenerational transmission of welfare use results from either shared norms and values or shared information.

Bertrand et al (1999) use Census data on individuals for whom English is a second language (and who therefore presumably mainly communicate in another language). They test the hypothesis that being surrounded by others who speak the same language increases welfare use more for individuals from language groups with high welfare use than for individuals from language groups with low welfare use. The assumption is that individuals from language groups with high welfare use will have less welfare stigma and/or more knowledge of welfare because of these networks. After estimating numerous models to overcome problems of selection bias, their research seems to confirm the importance of networks in welfare participation. Their estimates suggest that a policy change that increases welfare caseloads by 1 percent in the absence of networks can be expected to result in an observed increase of between 15 and 25 percent. Again it is difficult to sort out whether these apparent “contagion” or “contextual” effects are the result of differential information or differential stigma.

D. Take-up Rates.

Caseloads can change because the number of people eligible for the program changes or because the number of eligible people who actually participate in the program changes. Caseloads are the outcome of factors that affect both eligibility and take-up rates. Most of the factors that I have discussed so far are likely mainly to affect the number of people eligible for AFDC.

Reasons for non-participation among eligible individuals and families can include lack of information about the program, difficulties associated with joining the program or adhering to program rules (such as transportation problems), or the stigma associated with program participation. Studies that try to estimate why some eligible individuals participate in programs while others do not must try to determine who is eligible for programs from survey data. There are several problems with doing this. First, surveys often do not include all the information that a caseworker would use to determine eligibility. Second, because there are so many differences in eligibility rules across states and these change rapidly, researchers seldom can include all state-specific eligibility criteria in all years. Finally, income at the bottom of the income distribution is often mis-reported, and it is likely that the quality of income data at the bottom of the

distribution has declined over time.⁶⁷ All these measurement problems can cause misclassification of the eligibility of individuals or families.

Blank (1997b) estimates the relative importance of changes in participation rates among eligible families and changes in the number of eligible families to trends in the AFDC caseloads using data on twelve states from the Current Population Surveys. She finds that between 1984 and 1995 almost all the change in caseloads is attributable to changes in eligibility. The participation rate fell slightly over this period. However, it rose during the 1990-91 recession and fell afterwards.

E. Welfare Dynamics.

The 1996 changes to welfare limit the length of time that a family can receive welfare benefits. In the AFDC program women could get welfare indefinitely as long as they remained eligible. Many policy makers as well as voters worried that single mothers had become dependent on welfare. Thus several studies tried to estimate how long recipients stayed on welfare and what determined the length of welfare spells.⁶⁸ A welfare spell is generally defined as a period of continuous welfare receipt from the time the case is opened.

We know from these studies that:

- The average length of a welfare spell is less than two years. Among persons beginning a spell of AFDC receipt 48 percent will be off welfare within two years and 14 percent within four years.
- Most current recipients are in the midst of a welfare spell that will last more than five years.
- Changes in marital status and employment are the most frequent events associated with movement on and off of AFDC.

For example, Bane and Ellwood (1983) find that about 25 percent of welfare exits are due to an increase in the female head's earnings and about 30 percent are due to marriage. Other studies find that between 30 and 50 percent of exits are due to an increase in earnings.

⁶⁷ Bavier (1999) and Mayer and Jencks (1993) for a discussion of changes in income reporting over time.

⁶⁸ See for example, Bane and Ellwood (1983), Ellwood (1986), Blank (1989), O'Neill et al. (1987), Blank and Ruggles (1996), Fitzgerald (1995), Gritz and MaCurdy (1992), Pavetti (1993).

Administrative data on the length of a welfare spell for a sample of current AFDC recipients show that the length of the median completed welfare spell increased from 23 months in 1968 to 31 months in 1975, then decreased such that by 1990 it was back to its 1968 level.⁶⁹

Gottschalk et al. (1994) use PSID data to estimate changes in the length of welfare spells between 1974 and 1987. They estimate the likelihood that a family who receives AFDC in a year will also receive it in the next three years. Because most current AFDC/TANF recipients are long-term recipients, they estimate the change in the probability of being a long-term recipient among those with a high probability of being a long-term recipient. They find that the probability of being a long-term welfare recipient increased for blacks from about 55 to 69 percent. But the probability declined from 65 to 45 percent for non-black recipients. This does not suggest that over this period caseloads were significantly affected by changes in length of welfare spells, since most welfare recipients are not black.

The kind of measure of spell length used in Gottschalk et al. and other studies has well-known problems. A measure of welfare receipt that samples current recipients then estimates the length of their future stay on welfare (a censored sample) over-represents long-term recipients. Thus the median length of spells from this “point-in-time” measure is longer than the median length of spells for all recipients starting a spell and may yield misleading trends. Hoynes and MaCurdy (1993) used PSID data from 1968 to 1988 to estimate changes in the length of welfare spells using an alternative measure of welfare spells that does not over-sample long-term recipients. A woman is counted as on welfare if she is a single head of a household with a child who received welfare in the year. Using this measure they estimate hazard rate of leaving welfare in year k given that a woman was on welfare after t years of uninterrupted receipt. They find that the percent of spells lasting less than two years increased from 45 to 59 percent between 1975 and 1980. But the length of welfare spells increased between 1980 and 1988. By 1985 the percent of spells that would last less than two years was 51 percent. In contrast using the same data there was no trend in “point-in-time” estimates of spell length over this period.

Hoynes and MaCurdy also estimate the effect of demographic characteristics (age, education, marital status, number and age of children), economic factors and program variables (AFDC benefit level, wage rates, unemployment rate), and year splines to capture year trends on

⁶⁹ U.S. House of Representatives, various years.

spell length. They find that the likelihood of leaving welfare for those in spells greater than four years remained unchanged over the 1969-88 period. Both falling welfare benefits and lower unemployment rates reduce the length of shorter welfare spells. Demographic variables account for little of the trend in welfare spell length. Economic and program variables explain about half the decline in spell length between the late 1960s and early 1980s with most of this attributable to the decline in benefit levels. Neither benefit levels nor economic variables seem to explain the lengthening of spells after 1988. These results suggests that welfare recipients can roughly be divided into those who respond to economic and program incentives and those who respond slowly if at all.

Another way to look at welfare dynamics is to ask what is the total length of time that families are on AFDC over multiple spells. This is potentially important way to look at dependency because many families go on and off welfare several times. Using monthly SIPP data that summed across multiple spells of welfare receipt, Pavetti (1995) estimates that taking into account repeated spells new enrollees in the AFDC program could be expected to spend a total of six years in the program. For families on the AFDC rolls the average total length of time on AFDC was thirteen years. Women with little education, with little recent work experience, who were never married and who have several children or young children have longer total time on welfare.

The events associated with first taking welfare have changed somewhat over time (Boisjoly et al. 1996). Most importantly, the percent of first welfare spells that began because of a reduction in work hours declined from an average of 27 percent between 1973 and 1982 to an average of 24 percent between 1983 and 1991. Fewer spells also began as the result of a first birth to a never married woman (21 versus 27 percent).

F. Conclusions about AFDC Caseloads.

Taken together the studies on AFDC caseloads lead to the following conclusions:

1. Estimates of the relative importance of the unemployment rate and changes in the AFDC program are sensitive to how one models lags in unemployment and state dependence in caseloads. Because we do not have a strong theory about how these lags should work, it is unclear how to model them. The best single predictor of AFDC caseloads in year t is their level in $t-1$.

2. Unemployment and other labor market conditions are important determinant of caseload changes. Most estimates suggest that a 1- point increase in the unemployment rate would increase caseloads by 4 to 6 percent.
3. Welfare program parameters are important predictors of welfare caseloads. Higher benefits increase caseloads. But there is considerable debate about the effect of other specific program parameters, such as work requirements.
4. Although the increase in the number of single mothers is an important determinant of AFDC caseloads, other demographic factors seem to have played a relatively minor role in predicting trends in AFDC caseloads.
5. Although the evidence is not yet strong, some studies suggest that contextual effects may be important to welfare caseloads. People who are around others who use welfare are themselves more likely to use it net of their own eligibility for the program. It is unclear whether these effects are the result of better information or reduced stigma.
6. Models of caseload trends explain only a small fraction of the total variance in AFDC caseloads and they appear to do a worse job for more recent years than for earlier time periods. But they do a better job of predicting AFDC-UP caseloads than predicting AFDC-Basic caseloads, and they do not predict child caseloads at all.

IV. Research on Trends in Food Stamp Caseloads.

Much less research has been done on caseloads in the FSP than on AFDC/TANF caseloads. The FSP is a national program with much less variation across states and fewer potential disincentives (which is one reason it has more political appeal), so FSP caseloads are harder to model econometrically and less theoretically interesting to academic researchers testing economic or sociological theories. Hence they have done less research on the FSP. Most of the research on food stamps has either been done by the U.S. Department of Agriculture (USDA), which administers the FSP, or by contract research firms commissioned by the USDA. Much of USDA's interest in the program has been in whether the FSP alters food consumption and nutrition, so a lot of the research has focused on those issues rather than caseload changes.⁷⁰

USDA has published papers since 1988 in a series titled "Current Perspectives on Food Stamp Program Participation" that provides information on food stamp caseloads and

⁷⁰ The FSP was established at least in part as a way to promote the interests of farmers. Increasing the food purchasing power of the poor was supposed to increase food consumption nationwide, helping farmers stay in business. The FSP program is administered by USDA, not the Department of Health and Human Services, which administers cash transfers. USDA remains concerned with the agricultural industry and the nutritional status of Americans. The economic status of the population is of secondary concern.

participation. I do not review all these studies individually, because much of it is descriptive and many of the studies repeat the same analysis for different time periods. Instead I try to highlight the main findings from this work. I also discuss the few academic research papers that have been done.⁷¹ I organize this discussion in the same way that the discussion of AFDC caseloads was organized.

Almost all AFDC/TANF recipients are eligible for food stamps, so one might expect the food stamp caseload to move in tandem with the AFDC/TANF caseload. But because over 60 percent of food stamp recipients do not receive AFDC/TANF, these trends could diverge and the reasons for increases or decreases in the caseload may not be the same.

A. Effect of the FSP on Labor Supply.

The most important potential disincentive effect of food stamps is on labor supply. Because married couple and single individuals as well as single mothers can receive food stamps, there is no marriage penalty.

Fraker and Moffitt (1988) model the effect of joint participation in food stamps and AFDC on labor supply. The budget constraint for individuals on both food stamps and AFDC is complex and includes many kinks. The formula for computing countable income to determine food stamp eligibility and benefit levels is complex, and AFDC benefits are included in the food stamp formula (but food stamps are not counted in the AFDC formula). Thus, modeling the labor supply effects of AFDC and food stamps jointly is not easy. Fraker and Moffitt use economic and demographic data from the fifth wave of the Panel of the Income Survey Development Program (ISDP). They estimate that in 1980 the FSP reduced labor supply of female heads of families by about 9 percent. But marginal changes in benefit levels and the benefit reduction rates had only a minor effect on labor market participation. Thus, the additional work effort among single mothers that could be generated from changing the FSP is likely to be small.

Hagstrom (1996) uses data from the 1984 SIPP to model the effect of food stamp participation on the labor supply of married couples. The FSP is the largest means-tested

⁷¹ Relevant research papers in this series includes Doyle and Beebout 1988, Trippe and Beebout 1988, Allin and Beebout 1989, Trippe 1989, Doyle 1990, Martini 1992, Trippe and Doyle 1992, Trippe, Doyle and Asher 1992, Stavrianos and Nixon 1998, Gleason, Schochet and Moffitt 1998.

assistance program available to married couples, and about a third of food stamp expenditures go to such families. Hagstrom finds that the FSP has a weak effect on the labor supply of married couples. Decreasing the maximum benefit by 25 percent reduces the labor supply of husbands and wives by less than 1 percent. But Hagstrom also finds that increasing food stamp benefits by 25 percent would raise participation in the FSP among married couples by 7 percent. Because the labor supply effect from raising benefits is small, some of the rise in the participation rate must come from an increase in the take-up rate. Reducing the benefit reduction rate from 30 percent to 10 percent would raise participation by 12.9 percent.

B. Research on Caseloads.

B.1 Economic Conditions and Program Parameters. Wallace and Blank (1999) use the same data and models that they used to predict changes in AFDC caseloads to predict changes in food stamp caseloads. They find that food stamp caseloads are more responsive than AFDC caseloads to unemployment rates. They estimate that a 1 percentage point rise in the unemployment rate increases AFDC caseloads by 4 to 6 percent and the FSP caseloads by 6 to 7 percent. This is not surprising since a much larger proportion of the food stamp caseload is married couples and single individuals whose work effort is responsive to the business cycle. Most of the AFDC caseload is single mother families whose work effort responds much less to the business cycle. The FSP also appears to be more responsive than AFDC caseloads to the state's median wage. Whereas the median wage had little effect on AFDC caseloads an increase in the median wage reduces FSP caseloads. Again, this is presumably due to the fact that the food stamp caseload includes more married couples and single individuals.

A recent report by Trippe and Doyle (1998) used administrative data from the Food Stamp Quality Control Records between 1994 (when the caseload peaked) to 1997 (the year after TANF enacted changes to FSP eligibility) to describe changes in caseloads. Table 8 shows some results from their reports. It shows that 61 percent of the decline in the FSP caseload resulted from a decline in the number of families receiving welfare benefits, even though many families leaving AFDC/TANF presumably retained eligibility for food stamps. The number of legal immigrants receiving benefits fell by 54 percent, no doubt mainly as a result of the change in their eligibility. This reduced caseloads by 14 percent. Participation by childless unemployed adults, whose

eligibility was also changed by the new rules, fell precipitously. But because they were not a large part of the food stamp caseload, this accounted for only 8 percent of the decline in caseloads. Thus the decline in the FSP caseloads since 1993 appears to result from changes in factors affecting AFDC and changes in the parameters of the FSP.

This same study shows that participation in the FSP among native-born children of legal immigrants (who remained eligible for food stamps after the 1996 program changes) declined faster than the participation of children of non-immigrant parents (37 percent and 15 percent respectively). This suggests that restrictions on the eligibility of immigrant adults deterred participation by their children. Beginning in 1993 there was a surge in the number of legal immigrants who became naturalized citizens. The number of naturalized citizens who participated in the FSP increased by 66 percent. About 20 percent of the apparent decline in participation by immigrants was made up for by the fact that individuals switched from being immigrants to being naturalized citizens.

The 1996 welfare reforms restricted eligibility for food stamps among childless able-bodied adults to three months in any 36-month period unless they work, are exempt under other provisions, or live in areas of high unemployment. Stavrianos and Nixon (1998) estimate that, as expected, over time this will decrease the number of childless able-bodied adults who get food stamps. However, they also conclude that this will have a small effect on the overall food stamp caseload. In any month of 1996 3.8 percent of the food stamp caseload was subject to this work requirement. Of these only 4.7 percent were meeting the work requirement and could continue to receive food stamps. In principle the others (3.6 percent of the food stamp caseload) were accumulating a month towards their three-month time limit. But USDA projects that up to half of these cases will qualify for an exemption from the work requirement. The net result will be a small impact on the food stamp caseload.

B.2 Interactions with Other Programs. Wallace and Blank find an unexpected effect on the FSP caseloads of factors that in principle affect AFDC but not FSP eligibility. For example the implementation of AFDC waivers appears to reduce FSP caseloads even though none of the waivers directly affected eligibility for the FSP. There are two main explanations for this relationship, namely information and stigma. States that implemented AFDC waivers may have projected a “get tough” attitude towards welfare recipients thus raising the stigma associated with all welfare programs. As discussed above Wallace and Blank also found that

state Democratic Party leadership increased both AFDC and FSP caseloads. Since the FSP is a national program, state legislators cannot change program rules so any effect of political leadership is likely to be due to a political climate that is more or less sympathetic to welfare recipients.

Another possible explanation for the tighter-than-expected relationship between AFDC/TANF and the FSP is that historically eligibility for the two was determined at the same time. When families lose their AFDC eligibility they may think that they also lose eligibility for the FSP. But the new welfare rules seem to have also dissuaded some people from even trying to get welfare. This may be because they do not think that they are not eligible, because they do not want to go to work, or because they do not want to use up their 60-month eligibility. These families not only will not get TANF, they will not get information about food stamps, Medicaid or other programs that they may be eligible for.

The converse of this joint decline in program caseloads is that the expansion of the Medicaid program between 1988 and 1990 appears to have increased the number of women and children who participated in the FSP (McConnell 1991). None of the Medicaid expansions increased eligibility for food stamps, but they did increase the participation rate for mothers and their children presumably because the outreach efforts for Medicaid also provided potential recipients information about food stamps and other welfare programs. McConnell estimates that about 25 percent of the increase in food stamp participation between 1989 and 1990 can be explained by the expansion of Medicaid.

Gunderson et al. (1998) use aggregate-level national data between 1972 and 1996 to estimate the effect of the poverty rate, the unemployment rate, and the inflation rate on the percent of the population receiving food stamps (the participation rate). They estimate that a one percentage point increase in the inflation rate results in a .126 percentage point increase in the FSP participation rate. Food stamp benefits are tied to inflation so in principle inflation leaves the real value of benefits unchanged, and thus it should not affect caseloads. But AFDC benefits are not tied to inflation and states did not increase benefits, so inflation eroded the real value of AFDC benefits. As the real value of AFDC benefits decline, the FSP participation rate increases for the same reason that lower income people are more likely to participate, namely the marginal value of a dollar of benefits is higher. Gunderson et al. also estimate that a one-percentage point increase in the unemployment rate increases the FSP participation rate by .301 percentage points.

A dummy variable for the post-1990 period is large and statistically significant suggesting that a large part of the change in the participation rate after 1990 is unexplained by these characteristics of the macro-economy.

B.3 Demographic Characteristics. A considerable amount of evidence documents the demographic composition of FSP caseloads. But little research tries to assess the effect of demographic factors on trends in caseloads. Wallace and Blank (1999) find that food stamp caseloads are more responsive than AFDC caseloads to the demographic composition of states. The percent of state residents who are black, female heads of families, and the percent of non-marital births all increase FSP caseloads but not AFDC caseloads. Years of education and the percent of the population who are elderly reduce FSP caseloads but not AFDC caseloads.

B.4 Norms and Values. As already discussed, Wallace and Blank (1999) find that as with AFDC, Democratic political leadership in states tends to increase food stamp participation while Republican leadership in states tends to decrease it.

C. Take-up Rates.

By far most of the research on food stamp caseloads has been on the take-up rate. Participation rates among eligible individuals and households is lower in the FSP than in other means-tested programs, presumably because food stamps must be used in public and therefore carry more stigma.

Trippe et al. (1992) review research on food stamp take-up rates. They note that existing estimates for participation rates in the FSP vary by as much as 30 percent for any given year and unit of analysis. For example, estimates of the take-up rate among individuals range from 38 percent to 69 percent.

The discrepancy in the estimated take-up rates is partly due to differences in the data used for the estimates, especially in whether the study gets data on caseloads from administrative data or survey data. Studies that use administrative data generally find higher take-up rates than those that use household survey data. For example, the average participation rate for four studies using administrative data is 58.3 percent. The average for four studies with estimates over roughly the same time period using household survey data is 39.3 percent. Participation rates are the ratio of the number of eligible individuals or household (the numerator) to the number of participating individuals or households (the denominator). In all studies eligibility must be

estimated from survey questions. But administrative data provide the actual number of program participants while surveys provide an estimate. The actual number of participants is generally higher than the number estimated from surveys data. Thus studies using only survey data generate lower take-up rates.

Among household surveys the quality of the data needed to estimate eligibility varies considerably. Over a dozen different surveys have been used for this purpose. The Consumer Expenditure Survey (CES) provides consistently low estimates of participation: two studies using these data estimate a household participation rate of 24 percent (West 1984) and 28 percent (Brown 1988). This is probably because the CES income measures are measured with a lot of error (Mayer and Jencks 1993). Probably the best survey data for estimating eligibility is the SIPP, which was begun in 1984.

A few studies have tried to predict changes over time in the take-up rate of the FSP. Trippe (1989) estimates that the take-up rate increased from 43 to 65 percent between 1978 and 1981 due to program changes, mainly the abolition of the requirement that food stamps be purchased. The take-up rate dropped slightly in 1982 for unexplained reasons then remained steady between 1982 and 1988. In a follow-up study, Trippe et al. (1992) use administrative data on the number of persons and households receiving benefits and the amount of food stamp benefits and data on personal characteristics of recipients from a caseload sample. To estimate the size of the eligible population they use CPS data. They repeated these estimates using SIPP data for years after 1984. They find that the participation rate for individuals increased from 32.3 percent in 1976 to 39.5 percent in 1978 and to 56.4 percent in 1980. Again they attribute much of this increase to the program change eliminating the purchase requirement for food stamp coupons.

Trippe et al. (1992) also find that persons eligible for higher benefits participate at higher rates than persons eligible for lower benefits. This is consistent with other studies of the FSP and with studies of AFDC. It is also consistent with economic theory that predicts as transaction costs decline relative to the program benefit more people will participate. However persons who are eligible for the maximum benefit, who are therefore the poorest survey respondents,

participate at below average rates. This is also found in other studies and is probably due to mis-measurement of income in the lowest income groups.⁷²

There are important demographic differences in participation rates. In 1990 the participation rate for households with children under 18 years was 67.9 percent while the participation rate for households without children was only 36.9 percent. This is probably because households with children are more likely to get AFDC and AFDC recipients automatically qualify for food stamps. Trippe et al. (1992) and most other studies find that participation rates for the elderly are fairly low. Ponza and Wray (1990) give three reasons: 1) the elderly eligibles often believe that they do not need food stamps, 2) they prefer to rely on other sources for food, and 3) they do not know they are eligible. While participation rates differ across demographic groups, trends in participation rates have been similar for all demographic groups. Thus while changes in household characteristics could contribute to changes in caseloads, changes in the participation rates of households with different characteristics probably did affect caseload trends.

Blank and Ruggles (1996) use 1986 and 1987 SIPP data to estimate the determinants of participation in the FSP (and AFDC) among eligible single mothers. They try to predict whether a single mother participates in food stamps in a month that she is eligible. In other words they use the panel structure of the SIPP to create a data set of months of single parenthood and then they determine whether each “case” (a month of single motherhood) was eligible for benefits, experimenting with several estimates of eligibility. They find that single mothers often do not receive food stamps in months in which they are eligible. On the other hand, most mothers who go on food stamps do so immediately when they are eligible. Most of the spells of eligibility that do not result in women taking up the program are very short. Non-participants had lower expected benefits than participants and shorter spells of eligibility. They were also less disadvantaged on many parameters – they were less likely to be disabled, they had fewer children and more education than mothers who participate when they are eligible. This suggests that they were less needy. Taken together these results suggest that women who fall on hard times and anticipate that the situation is temporary do not want to incur the high transaction costs

⁷² Jencks and Mayer (1997) and Mayer and Jencks (1989) show that the material living standards of the extremely poor are often higher than those with higher incomes. They take this as evidence that income is badly measured for those in lowest 10 percent of the measured income distribution.

(and possibly stigma) of getting benefits. This is especially true when the potential gains are relatively small.

D. Program Dynamics.

Studies in the USDA series find that most people who begin receiving food stamps receive them for a relatively short period (Gleason et al. 1998). In the 1990 and 1991 SIPP half of all persons who began receiving benefits quit receiving them within nine months. But research also shows that at any particular point in time most food stamp recipients are in the midst of a long spell of food stamp receipt. Among the food stamp caseload in a given month between 1990 and 1991, three-quarters of the recipients were in the middle of a spell of at least two years and 60 percent were in a spell of at least five years.

Re-entering the food stamp program is common. For example, more than half of those who stop receiving food stamps re-enter the program within two years (Gleason et al. 1998). High re-entry rates imply that food stamp recipients are highly dependent on food stamps over time. Among recipients who received food stamps any time between 1990 and 1991 a third received them for all 32 months of the panel and only a little over a third received them for a total period that was less than twelve months. The median total time on food stamps was twenty months (Gleason et al. 1998).

The length of spells increased significantly between the mid-1980s and early 1990s. Half of all persons who began receiving benefits in the mid-1980s were off within six months. In the early 1990s it took nine months for half the people who began receiving benefits to quit getting them (Trippe and Doyle 1998). Neither entry nor re-entry rates changed over this period meaning that the longer spells accounted for much of the increase in caseloads over this period.

Not surprisingly, household income is the most important determinant of how dependent the household is on food stamps. Households with some labor income when they come on the rolls and households with more income exit quicker and have fewer re-entries than households in which no one works and with incomes below the poverty line (Gleason et al. 1998).

For able-bodied adults without children higher unemployment rates and falling wages in the state's manufacturing sector are associated with longer spells of food stamp receipt even with the household's own income controlled. Because eligibility does not change if income does not

change, this suggests that as the economy in a state worsens the stigma associated with getting benefits declines or the information about the benefits is more readily available.

For other groups, including the elderly and families with children, labor market conditions had a small and statistically insignificant effect on length of food stamp spells. Female-headed families with children remain on food stamps longer than other kinds of families, and families with children under age six have especially long spells.

E. Conclusions about the FSP Caseloads

Research on food stamps suggests the following tentative conclusions:

1. Economic variables predict FSP caseloads better than they predict AFDC/TANF caseloads, partly because economic variables have a greater effect on the participation decisions of married parents and single individuals than on single parents.
2. Food stamp caseloads respond to changes in food stamp program parameters, but they also respond to changes in other programs, especially AFDC/TANF and Medicaid.
3. A large part of the increase in FSP caseloads in the mid-1980s and early 1990s was due to an increase in the length of food stamp spells. A large part of the decline in the late 1990s is due to changes in the FSP and in other welfare programs that decreased the take-up rate for food stamps.

V. Research on Trends in the SSI Caseload

Social scientists have not done as much research on SSI as they have done on AFDC. SSI recipients are either seriously disabled or elderly and therefore not expected to work. Thus there has been little controversy over disincentives provided by the program. As with food stamps much of the interest in SSI has been in trying to explain why so many of the people who are eligible for benefits do not receive them. Research on SSI is also hampered by the fact that few data sets include enough information on respondents' health status to accurately estimate whether a non-elderly person is eligible. Thus nearly all the research is on take-up rates among the elderly.

Researchers have also tried to understand the increase in child SSI cases, but because this seems so closely tied to the Supreme Court decision in *Sullivan v. Zebley*, this too has not

provoked much academic research. Recently the potential incentive for parents to claim that their healthy children are disabled has become a focus of some research.⁷³

A. Take-Up Rates.

Research on the take-up rates of the elderly encounters many of the same methodological issues that arise in estimating food stamp take-up rates, namely that survey data do not include sufficient information to accurately determine whether respondents are eligible for SSI. But available estimates suggest that the proportion of the eligible elderly who participate in SSI has always been fairly low. Estimates range from 54.6 percent using CPS data (Sheil et al. 1990) in the federal SSI program (with lower participation rates for state programs), to 61 percent with the superior SIPP data.

The proportion of the elderly who get SSI benefits has declined over time. This is partly because the income of the elderly has increased. However, rising incomes cannot entirely account for the decline in participation among the elderly because the proportion of the elderly who are poor and getting SSI has also declined.

Warlick (1982) reviewed very early research on SSI participation rates, which found that elderly persons eligible for SSI did not participate because they lacked information about the program, because they did not believe they needed the money, or because they preferred to get help some where other than the government. Warlick then used 1975 CPS data to estimate the determinants of SSI participation among the elderly eligible population. She was interested in the effect of information, stigma, bureaucratic complexities, and benefit levels. Although measuring expected benefit levels is relatively straightforward, measuring the other variables is not. She included a variety of variables to tap information and stigma including respondents' age, education, marital status and region of residence and whether their state automatically conferred Medicaid eligibility on SSI recipients.

She found that the participation rate among home owners increased from 41.2 percent to 55.7 percent when the expected benefit level doubled from about half the median to the median benefit. She also found that education was negatively related to participation. This suggests that

⁷³ When SSI was first implemented there were several studies that tried to project the likely growth in the program. They used various models to simulate caseloads. I do not review these here because they mainly amount to attempts to apply the eligibility rules to survey data. Menafee et al. (1981) discusses some of this early work.

lack of information may not be an important factor in take-up rates. But stigma may be positively associated with education and this could explain its negative effect. Residing in a rural area was positively related to participation. If participation depended on transaction cost this would be unexpected. Living in a state that automatically confers Medicaid eligibility also did not increase participation. The latter two finds do not suggest that transaction costs are a large deterrent to SSI participation. However, Warlick uses only federal eligibility standards in determining SSI eligibility and benefit levels, which could introduce considerable biases in her estimates

In 1974 the Social Security Administration conducted the Survey of Low-Income Aged and Disabled to assess the impact of SSI on potential participants. Menefee et al (1981) analyzed these data in an attempt to understand the relatively low participation rate among those eligible for SSI. They found that among the elderly who are eligible for SSI non-participation is related to better health, lower predicted benefits, non-metropolitan resident, stable income, unwillingness to accept public aid, and lack of knowledge about available services. These results are therefore broadly consistent with Warlick (1982).

Coe (1985) used data from the 1979 PSID. Of the 187 elderly individuals estimated to be eligible for SSI benefits, 52.2 percent actually received benefits. Of those not receiving benefits 36.2 percent said they either did not know about the program or did not know about eligibility rules and therefore did not think they were eligible. Another 37.4 percent knew about the program but did not think they were eligible and 26.4 percent thought they were eligible but still did not participate. Coe also estimated a model of participation similar to Warlick's model and found similar results.

It is hard to know how to interpret these measures of knowledge of the SSI program. Potential recipients inclined to take SSI benefits might be more likely to seek out program information and to pay attention to information that is available. So lack of knowledge about the program may partly indicate lack of interest. This suggests that information campaigns might not be as successful at increasing take-up rates as these findings on lack of information suggest.

McGarry (1996) used the 1984 panel of SIPP to estimate the determinants of participation in SSI among elderly individuals and couples eligible for the program. As predictors she included potential benefits, availability of a car, living in a city, years of schooling, age, and health status. Like other researchers she found that a higher expected benefit

is the main determinant of participation in SSI. In addition, even after controlling the size of the expected benefit, individuals with assets or who reported some labor income are less likely to participate. Many factors expected to reduce the cost of getting benefits (such as owning a car, living in a city, and having more education) were weakly or even negatively related to participating. McGarry interprets this to mean that the transaction costs of participation are less important than other researchers have suggested.

McGarry also tried to account for measurement error in her estimate of potential SSI benefits. This is an important issue because most data sets do not have sufficient information to accurately calculate the SSI benefit one would receive. Errors in measuring potential benefits can create the standard errors-in-variables problem, which could result in a downwardly biased estimate of the effect of benefit levels and bias in the estimated effect of variables correlated with the benefit level. Because benefit levels are also used to estimate eligibility, errors in benefits could cause errors in the classification system. McGarry uses a two-stage procedure to create an instrument for the potential benefit.⁷⁴ She finds that when she ignores mis-measurement of benefits, a 25 percent increase in benefits is associated with a 3.5 percentage point increase in the probability of participating. When she takes measurement error into account the increase is 6.1 percent. McGarry concludes that elderly people eligible for SSI mainly respond to the economic incentives of the program and that information, costs of participating and stigma are likely to be less important than suggested by earlier research.

Sheils et al. (1990) use CPS data to estimate trends in the SSI participation rate among eligible people over 65 years of age. The take-up rate increased from 54 to 61 percent between 1975 and 1978. The rate then declined to about 56 percent in 1987. They attribute the latter decline to a decrease in the number of elderly eligible for the maximum benefit due to an increase in income from other sources.

B. Changes in the Definition of Disability.

⁷⁴ Her instrument is the average of reported monthly income over four months less reported SSI benefits. She also uses state-specific eligibility data to increase the accuracy of her predicted benefit levels. She estimate benefits both for those who actually receive them and for those who did not. When she compares her predicted benefit level to the observed benefit level among those who got benefits she finds a correlation of .84.

In 1996 21 percent of SSI recipients were aged. The remainder was eligible due to disability. So changes in disability can have a large effect on SSI caseloads. The most important change in the definition of disability was the change in how children's disability is assessed.

By far the largest category of disability for the SSI program is mental illness. In 1996 among 18 to 64 year olds 30.4 percent of recipients had a mental disorder and 28.4 percent were mentally retarded. The next largest category is "nervous system and sense organs," which includes most people eligible due to blindness. In 1996 10.1 percent of recipients had this diagnosis.⁷⁵ In 1992 (the latest year for which I could find data) 58 percent of children were eligible due to a mental disorder and most of these (44 percent) were mentally retarded. The only other major category of disability for children is blindness. Because some mental illness is difficult to diagnose the definition of mental illness has changed over time, which could in turn lead to changes in the SSI caseload. However, I was unable to find any information on trends in diagnosed mental disorders.

The number of children who receive SSI more than doubled between 1989 and 1992 (from 300,000 to 770,500). A study by the United States General Accounting Office tried to determine why child caseloads grew so much. It compared children admitted to the SSI caseloads two years before and two years after the medical listings were expanded and new procedures for assessing disability among children were implemented in response to the 1990 Supreme Court ruling in *Sullivan v. Zebley*.

As part of its decision the Supreme Court ordered that children denied SSI benefits from 1980 on should receive a new review using the new rules for determining eligibility developed in the decision. The GAO (1995) found that the new procedures added 87,900 children to the rolls, about 19.6 percent of the increase.⁷⁶ GAO found that the increase in the diagnosis of mental impairments including mental retardation and attention deficit hyperactivity disorder accounted for more than two-thirds of the growth in SSI caseloads among children.

In 1985 AIDS was added as a condition for "presumptive disability." This meant that people could get SSI benefits for up to six months while a determination of disability was being made. In 1991 HIV was added as a category for presumptive disability. However, HIV and

⁷⁵ U.S. House of Representatives, 1998, page 297.

AIDS have added few cases to the SSI rolls partly because treatments for the disease have lessened its severity and partly because few people have the disease.

In 1996 Congress passed legislation that removed drug and alcohol abuse as disabling conditions for the purpose of SSI eligibility. In January 1997, recipients classified as drug addicts or alcoholics were no longer eligible for SSI. In June 1996 there were 119,000 SSI recipients whose disability was based on drug or alcohol abuse. But the Congressional Budget Office estimated that up to 75 percent of them would be eligible for SSI based on another disabling condition. Because there were 6.5 million SSI recipients in 1996, the impact of the change on caseloads due to the change in policy on drug and alcohol abuse was no doubt trivial.

C. Conclusions about Research on SSI Caseloads

We can draw the following conclusions from the research on SSI caseloads:

1. Take-up rates for the SSI program are low. The highest estimates suggest that only around 60 percent of the elderly who are eligible participate in the program.
2. The main determinant of participation among elderly eligibles is the size of the potential benefit.
3. The increase in the number of children participating in SSI is mainly due to the expansion in eligibility due to changes in how disability among children was determined.
4. Other changes in the definition of qualifying disabilities probably had trivial effects on changes in the SSI caseload.

VI. Conclusions

The research in this Report makes it clear that no one factor explains caseload trends either for a particular program or for social welfare programs in general. This Report outlined four exogenous factors likely to affect caseloads: macroeconomic conditions, exogenous demographic characteristics, program parameters, and norms and values. Evidence suggests that no single factor consistently explains the observed trends in AFDC, SSI or FSP caseloads, but all of them may explain at least some of the observed caseload changes. The main substantive conclusions that apply to all programs from the research reviewed in this Report are:

1. All else equal, when programs are generous more people participate in the program. The largest single determinant of whether an eligible person takes-up a program is the size of the expected benefit.

2. All else equal, when unemployment is low fewer people participate in welfare programs.
3. Neither economic variables, nor program variables, nor the combination explains much of the change over time in caseloads or state differences in caseloads and the predictive power of models of caseloads seem to explain less of the variance in caseloads over time.
4. The take-up rate among those eligible for a program is an important determinant of caseloads.
5. Program interactions are important. Changes in Program A that result in a change in caseloads of Program A can also affect the caseloads in Program B even when the change to Program A has no direct effect on eligibility for Program B.

Different factors seem to have affected programs differently. This is partly because the programs themselves differ. For example, macroeconomic conditions will have a much smaller effect on caseloads of programs whose participants are not sensitive to business cycle fluctuations, such as the elderly and single mothers, than on programs whose participants are non-elderly men. Programs targeted at specific demographic groups will be more sensitive than other programs to changes in the size of that demographic group.

Following are conclusions about such differences.

1. The trend in AFDC caseloads is due to combinations of macro-economic changes, demographic changes including the increase in single motherhood, and program parameters, especially benefit levels. Different factors seem to have affected caseloads at different historical periods.
2. The trend in the SSI caseloads is largely due to the increase in the income of the elderly, which reduced their use of SSI, and the change in the criteria by which children were judged to be eligible.
3. The FSP caseload is affected by the unemployment rate and other program parameters. The FSP caseload seems to be especially influenced by AFDC/TANF program parameters because receipt of FSP benefits has been closely tied to receipt of cash welfare benefits.

However, this research is subject to some potentially serious limitations. The next section discusses some of those limitations. The following section discusses some guidance for social welfare policies that follow from this research

A. Methodological Issues.

This research raises several important methodological issues. Many of these problems arise because social scientists have not developed strong theories about what factors should affect caseloads and in what way. Although the theory of welfare participation among individuals is fairly well-developed, theory about how state-level factors affect caseloads is less well developed. This leads to three related potential sources of bias.

- Most empirical models of caseloads are either reduced-form, and therefore do not allow us to understand the causal mechanisms through which variables work, or they include a few intervening variables that are poorly measured.
- None of these studies does a good job of creating a dynamic model that takes into account the possibility that caseloads and program parameters may be jointly determined and reach different equilibrium under different circumstances.
- Most research fails to adequately address possible contagion or contextual affects of welfare receipt.

I will discuss each of these then turn to two other methodological issues, namely the problem of weak measures of predictor variables and the importance of choosing the right dependent variable.

A1. Limitations of Reduced-form Models. Reduced-form models do not try to specify the mechanisms through which exogenous variables affect an outcome. For many purposes this appropriate or at least sufficient. If one wants to know the net effect of a policy change on caseloads, a properly specified reduced form model provides the answer. However, misunderstanding the mechanism whereby effects occur can lead to serious problems in interpreting the meaning of such results, especially for policy purposes. Imagine that a program change predicts a decline in caseloads. The decline could be the result of more people getting a job and therefore becoming ineligible, or it could be the result of fewer eligible people participating in the program. In the former case well-being might improve while in the latter it might deteriorate. Thus the reduced form model provides little guidance to policy-makers who want to improve well-being.

A few of the studies in this Review have included measures that might be partly endogenous. But the measures are often poorly conceptualized or poorly measured. For

example, Blank (1997b) and Wallace and Blank (1999) include the percentage of state residents who are female heads with little rationale about why they do so. Several studies of SSI take-up rates include measures intended to tap how much individuals know about the SSI program, but these are generally weak measures of such knowledge, such as educational attainment. Some studies include variables for state political leadership but it is unclear whether these are supposed to be exogenous or endogenous and their meaning is ambiguous. No paper explicitly tries to estimate a causal model of caseloads.

A2. Dynamic Models. A second and related problem resulting from weak theory is that we have little guidance about modeling lags in exogenous predictors of caseloads. For example, we have little guidance about whether a change in unemployment should simultaneously increase caseloads or increase them with some lag. Because families may have some savings, because they are likely to call on friends and family for help before they turn to the government, and because getting information about government programs takes time, some lag seems likely. But the length of the lag is unknown.

This research also provides little guidance about possible feed-back effects between exogenous factors. A change in the economy that increases welfare use might then affect welfare program parameters. Consequently these models cannot tell us about the likely equilibrium caseload level or what might change that equilibrium.

Evidence suggests that models that predicted caseloads in the 1970s well do not do as good job at predicting caseloads in the 1980s or 1990s. Few models include all four exogenous “causes” of caseloads shown in Figure 11 and the studies that do try to include them all are plagued by measurement error and omitted variable bias. Over time if unmeasured or poorly measured factors become more important in determining caseloads, the predictive power of the model will decline. It is nearly inevitable that this will occur, because current models tend to be based on what seems important today, especially when they are not guided by a strong theory. Currently in the United States policy analysts are very interested in the relative importance of the economy and program changes on TANF caseloads and very uninterested in changes in social norms and values. Models of caseloads therefore included the former variables and ignored the later. However, it is likely that the welfare changes of 1996 greatly changed the attitudes towards welfare among potential and actual welfare recipients and the public. These unmeasured

changes could account for why models predict post-TANF caseloads worse than pre-TANF caseloads.

Models of caseloads can also lose predictive power over time if the composition of the caseloads changes. Imagine that at time 1 all AFDC recipients are single mothers. Program parameters might be very important relative to labor market conditions in predicting caseloads because the labor market participation of single mothers is relatively unresponsive to labor market conditions. If a program or social change increases the number of married couples receiving the benefit, labor market conditions are likely to become more important for predicting caseloads. If on the other hand children are the main recipients, labor market factors will be even less important.

A.3 Contextual Effects and the Possibility of Multipliers. The models of caseloads used in almost all this research are aggregate versions of the individual-level model of welfare participation and are loosely based on the economic theory of welfare program participation. Thus rather than an individual's own employment probability the models include the state unemployment rate and rather than a woman's own marital status it includes the percent of state residents who are single mothers. None of the research explicitly takes into account the potential importance of "contextual effects" or "contagion effects" on welfare use although what evidence that we do have suggests that such effects might be important and result in multiplier effects of policy or other changes.

To understand how "contagion" might operate imagine a state in which unemployment rises. More people become unemployed so more will be eligible for food stamps. But other things may happen as well. Some of the newly unemployed people never will have gotten public assistance. When they get it they tell their friends about it. As more people get food stamps the stigma associated with getting the benefit declines and the availability of information about how to get on the program increases. Public sympathy for the unemployed may also increase, reducing the stigma associated with using food stamps. Caseworkers too might be more sympathetic and treat applicants more kindly. When unemployment returns to its old level a greater aggregate propensity to get benefits remains for some period. In addition the greater aggregate propensity to get benefits may delay the decline in unemployment in the same way that generous unemployment benefits extend periods of unemployment.

A.4 Weak and Omitted Predictors. I have already mentioned several problems arising from omitted variables. A few others deserve mention. The economic theory of program participation takes program rules as exogenous. Research in the United States uses state differences in welfare program parameters to identify models of caseloads. But we have no strong theory about why programs differ across states. For example, it is now well-established that individuals respond to the size of the potential welfare benefit. But the size of the welfare benefit may depend on a culture in the state that both increases benefits and creates an inviting atmosphere for potential welfare recipients. Omitting measures of the implementation practices that create the inviting atmosphere could lead us to over-state the importance of the benefit level.

Research using fixed-effects overcomes some of these problems by estimating the effect of changes in program variables and other factors on changes in caseloads. But of course this leads to the problem of why states differentially change their programs. If the factors that are associated with state's changing the program also affect the caseloads directly, the results can be misleading.

None of the research reviewed here does a good job of measuring transaction costs. However, it is likely that transaction costs are correlated with other program parameters and may be correlated with economic conditions and norms and values. When unemployment rises and demand for welfare increases, lines at welfare offices might increase and case workers might become over-worked and irritable. Both could increase transaction costs. Welfare administrators might even respond to an increase in demand for welfare by reducing the hours that welfare offices are open, reducing the number of case workers and doing other things that raise transaction costs in an effort to hold down increases in caseloads. I was able to locate no research on the effect of implementation policies on welfare participation or caseloads. For example, I could find no study of the effect of proximity to welfare offices or wait times in welfare offices on participation.

Researchers are turning some attention to implementation issues because of ad hoc evidence that they are important. For example, in a study of the effect of recent policy changes on work effort among single mothers, Ellwood (1999) devised a measure of changes in the "aggressiveness" of welfare caseworkers. He reasoned that if a person with income of Y could get welfare in State A but not State B, caseworkers in State B were more aggressive in preventing welfare use. If in State A this person would have gotten benefits at t but not at $t+1$,

the state has gotten more aggressive. Ellwood finds that this measure of caseworker aggressiveness is positively related to single parents' work effort.

A. 5 The Dependent Variable. Almost all this research treats welfare receipt as a simple dichotomy – either people get it or they do not. But many of the same factors that affect whether people get welfare affect how much they get. How much welfare people get might be a better predictor of welfare costs than how many people get it. When women combine welfare and work, they remain a part of the welfare caseload but they consume fewer welfare dollars.

One important lesson from this research is that if one wants to know about caseloads, one should estimate models of caseloads rather than models of things correlated with caseloads. A large amount of research tries to predict labor market work and marriage from welfare program parameters. This is useful for understanding the incentives of welfare programs, but it is much less useful for predicting the size of caseloads. On the other hand, if one is interested in welfare costs, one should estimate these directly since caseload size is only one determinant of welfare expenditures.

B. Policy Implications.

B.1 Benefit Levels. This research confirms that all else equal when welfare benefits are high and easy to get participation among eligibles is high. When benefits are low and hard to get participation is low.

B.2 Program Interactions. Changes in program parameters have the greatest impact when their basic intent is consistent with that of other programs. When programs work together they are more likely to have behavioral consequences than when they have incentives for opposing behaviors. The EITC alone seems to have had an important work incentive but combined with TANF rules making work all but mandatory its effect on work effort seems to have been very large.

When program changes are further tied to economic, demographic and social factors that converge in encouraging the same set of behaviors the effect can be immense. This appears to be what has happened since 1996. An unusually strong economy coincided with several policy changes all intended to get single mothers off welfare. The changes that reduced the link between Medicaid and AFDC made it possible for more women to work without giving up health insurance at the same time that TANF made work a requirement and the EITC provided greater

subsidies for low wages. All this happened at the same time that a strong social consensus supported the notion that single mothers should work in the labor market to support their children.

The converse of these synergies is that when program rules are inconsistent with social norms or economic conditions they can be thwarted. In the early 1970s few case workers seemed inclined to implement sanctions against mothers who did not work both because few jobs were available and because there was still ambiguity about whether mothers of young children should work. Consequently, few welfare recipients were involved in work activities and few were sanctioned for not doing so.

Program interactions can cause unintended consequences when their incentive structures are in opposition. The strong connection between Medicaid and AFDC prior to 1990 seemed to have resulted in a greater work disincentive than either program alone and the recent changes implementing TANF seem to have unexpectedly reduced the take-up rate in other programs because of the joint determination of eligibility.

B.3 Large versus Small Policy Changes. Although it seems obvious, policy makers often seem to ignore one implication of the research in this review and others, namely that large changes in programs have greater effects on recipients than small changes. By a large change I mean one that either affects many potential or actual recipients or one that greatly changes the incentive structure of a program.

Changes to the SSI program that included HIV and AIDS and removed drug and alcohol addiction as allowable disabilities had little effect on caseloads because few potential or actual recipients had these disabilities. But changes in the way disability was defined for children made a big difference because a lot of children had qualifying disabilities.

Small changes in incentives cannot be expected to have large behavioral changes. Many things besides welfare parameters affect individual's decisions about work, marriage, or childbearing. So it should come as no surprise that a marginal change in a welfare program does not have a large effect on these decisions. During the late 1970s and early 1980s Congress and the President "tinkered" with welfare program parameters, wrapping small changes in big rhetoric. For example, for all its emphasis on work effort the Family Support Act in fact encouraged only modest changes the training or work experience of welfare recipients (or in anything else about how states actually implemented welfare). The result was relatively minor

changes in caseloads attributable to the program changes. In contrast the evidence that we currently have suggests that the 1996 changes, which essentially dissolved AFDC, appear to have had larger effects on caseloads.

Large effects should not be confused with cost-effectiveness. Research suggests that small amounts of help in searching for a job are cost-effective in getting welfare recipients into the labor market. But the overall effect of such programs on women's earnings and welfare receipt are very small. These programs are cost effective mainly because they are very cheap, not because they result in large changes.

B.4 Differential Effects of Incentives. Doubtless people respond to program incentives. However the extent to which they respond depends on their own characteristics. Research on take-up rates of SSI, the FSP, and AFDC/TANF consistently show that the most disadvantaged households are the most likely to participate in programs. This is consistent with economic theory because the marginal gain from participation is greater for the most disadvantaged. Labor market conditions have the greatest effect on people for whom labor market work is a viable alternative to welfare. People who are seriously disabled, who have young children and no child care options, or who have very low labor market skills are unlikely to respond to changes in the labor market because there is no realistic labor market conditions that would make work possible. TANF allows states to exempt 20 percent of a base caseload from work requirements in recognition of the likelihood that not all recipients will be able to earn a living in the private labor market. It is too early to tell whether this is close to the right number.

The most advantaged respondents are not only able to take advantage of improvements in the economy, they are also the most likely to have alternatives when changes in welfare rules reduce the well-being of welfare recipients. When benefits decline the least advantaged still have no alternative income source. Not all welfare recipients are the same and program changes that help the most advantaged recipients might hurt the least advantaged. To put this argument another way, what works to get the first half of welfare recipients into work may not work for the next half.

It is clear that program parameters affect caseloads and therefore that policy-makers can regulate the size of the welfare population. After all if one abolishes a program the caseload goes to zero. But all rich countries have some program to help the poor. This is because the

citizens of such countries care not only about program caseloads and their costs but also about the well-being of the poor. Falling caseloads do not imply greater well-being. Given constant program parameters falling caseloads probably imply greater well-being because people leave the program rolls when their well-being is greater off the program than on it. When the program parameters change people still leave the program when this improves their well-being. But those who leave may still be worse off than they would have been before the changes.

As Table 3 showed, a single mother who earned \$10,000 in 1997 was better off than she would have been in 1986. But she may not be better off than a woman who did not work ten years ago. In Pennsylvania, a fairly representative state, in 1992 a single mother with two children and no earnings would have had an income from combined AFDC and food stamp benefits of \$8,547.⁷⁷ All this would have been “disposable” income because she would not have to pay taxes, childcare, or other work expenses. And she would get to spend more time with her children or in leisure. This is clearly greater than the \$6,924 that a mother earning \$10,000 would have had in disposable income in 1997. Thus working women are better off than they would have been ten years ago but non-working women are worse off than they would have been ten years ago and worse off than they would have been *as non-working* women ten years ago. Whether women and children as a whole are better off now than ten years ago depends on the value of work itself (apart from the earnings it generates).

When a program has time limits it is almost certain that people expelled from the program will be worse off, at least in the short run, than they would have been if allowed to stay on the program. Consequently, time limits can improve social well-being in only two circumstances. Social well-being will improve if the tax savings or alternative uses of money improves the well-being of those who do not participate in the program enough to off-set the decline in well-being for those who participated in the program. Social well-being will also improve if the short-term declines in well-being from the program changes are off-set by long-term increases in well-being for those who participate in the program. For example, if TANF recipients are financially worse off for a couple of years but the work experience that they gain by being forced to work improves their long-term well-being they will be better off in the long run.

⁷⁷ U.S. House of Representatives, 1992, page 628.

Although evidence about the determinates of caseloads is accumulating, there is much less evidence about whether the caseload changes are accompanied by rising or falling well-being. If we are interested in the well-being of the poor, we need to study that directly.

Appendix 1

Description of Data Sets

Following is a brief description of the most commonly used data sets in the studies reviewed in this Report.

Current Population Survey (CPS). The CPS is an on-going survey begun in the 1940s administered by the US Census Bureau. It has a rotating design in which households are in the sample for four months, out of the sample for eight months and in again for four months. The sample in any month is about 60,000 households. The sample includes the U.S. civilian non-institutionalized population. The annual March Supplement, which includes extensive information on labor market participation in the last year and a job history, also includes military living in civilian housing and an over-sample of 2,500 housing units with an adult of Hispanic origin. The CPS has been redesigned on several occasions so researchers must take care to assure comparability of data over long time periods.

Consumer Expenditure Survey (CEX). The CEX is sponsored by the Bureau of Labor Statistics and conducted as an on-going survey by the Census Bureau. Data in all the studies in this Report come from the Interview Survey, which includes about 5,000 households who are interviewed at three-month intervals for five quarters. There are monthly rotation groups, so each month 20 percent of the sample is new and 20 percent is completing its fifth quarter. The sample includes the U.S. civilian non-institutionalized population including military living in civilian housing. The reporting unit is the “consumer unit” defined as a single person living alone or sharing a household with others but financially independent from them, a family (all persons in the same housing unit related by blood, marriage, or adoption), or unrelated individuals sharing major expenses. Household response rates have been about 85 percent since 1980. The CEX has been conducted since the early 1960s but it has only been an on-going survey since 1980. Data from 1980 on are often not comparable with earlier data.

Panel Study of Income Dynamics (PSID). The PSID is a continuing panel study of a cohort of families first interviewed in 1968. The survey is sponsored by and conducted by the University

of Michigan Survey Research Center. Since 1983 the National Science Foundation has been the principle funder of the PSID. The sample has three components: 1) the 2,900 families chosen to be representative of the non-institutionalized U.S. population in 1968 2) an over-sample of 1,900 low-income families with heads under the age of sixty also selected in 1968, 3) 2,000 Hispanic families added in 1990. The current sample includes all original sample members and the subsequent families of their members for about 9,000 families and the individuals in them. Current response rates are high, although attrition from the original sample was high. The PSID includes extensive information on family members including data on education, labor market experience, marriage, fertility, geographic mobility and other things. It also includes special supplements on topical issues.

Survey of Income and Program Participation (SIPP). SIPP is a continuing panel survey begun in 1983 that is sponsored and conducted by the Census Bureau. The design is a rotating panel with a new panel of households introduced each February and interviewed every four months for forty-eight months. The sample includes the U.S. civilian non-institutionalized population and members of the military living in civilian housing. The sample has varied from 12,500 to 23,000 households per panel. The survey includes extensive information on monthly participation in government programs, monthly labor market participation, and family and individual demographic characteristics.

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Table 1 A Guide to Income in the United States in 1996

Unit	Amount
Income and Earnings	
Median Household Income ^a	\$35,492
Median Annual Earnings of Individuals ^b	\$25,768
Median Weekly Earnings of Individuals ^c	\$490
Federal Minimum Wage/Hour	\$4.75
Poverty	
Poverty Line, Family of 3 ^d	\$12,273
Poverty Line, Family of 4 ^d	\$16,183
Official Poverty Rate ^e	13.7 percent
Child Poverty Rate	20.5 percent
Elderly Poverty Rate	10.8 percent
National Income	
GDP	\$7,484.7 billion

Source:

a. U.S. Census Bureau, "Historical Income Tables," Household Table H-5. Amounts include all cash income before taxes.

b. U.S. Census Bureau, *Statistical Abstract of the United States*, 1997, Table 672. Earnings are for workers with earnings.

b. U.S. Census Bureau, *Statistical Abstract of the United States*, 1997, Table 671. Earnings are for full-time wage and salary workers.

c. U.S. House of Representatives, 1998, page 1301

d. U.S. House of Representatives, 1998, page 1303

Notes: Earnings are for full-time, year-around workers.

Table 2 Major Social Welfare Programs in the United States

Period	Program	Description	1996 Federal Outlays in Billions
New Deal (1935-1938)	Social Security	Income support for the elderly whose employers contributed to the program	\$374.4 ^a
	Unemployment Compensation	Cash transfers for involuntarily unemployed individuals for a specified time	\$22.8 ^a
	Old Age Assistance (later SSI)	Income support for low-income elderly and disabled	\$24.1 ^a
	ADC (later AFDC)	Income support for low-income single mothers	\$17.6 ^a
	Housing Assistance		\$25.3 ^b (total housing assistance)

Continued on next page

Table 2, continued

Period	Program	Description	1996 Federal Outlays in Billions
War on Poverty (1965-1969)	Medicaid	Subsidized health care for low income families	\$92.0 ^c
	Medicare	Health Insurance for the elderly and certain disabled individuals	\$313.7 ^a
	Insured College Loans	Low interest guaranteed loans and direct student loans	\$4.6 ^d
	Pell Grants	Grants to low income college students	\$5.6 ^d
	Compensatory Education (Chapter 1)	Economic support for schools with high proportion of low income children	\$7.1 ^e
	Head Start	Pre-school for low income children	\$3.5 ^e

Continued on next page.

Table 2, continued

Period	Program	Description	1996 Federal Outlays (in Billions)
Second War on Poverty (1970 – 1976)	Food Stamps	Food coupons for low-income families	\$25.4 ^c
	Section 8 Housing	Subsidized rent in the private housing market for low-income families	see above
	EITC	Tax credit for employed low income parents	\$19.2 ^c

Sources:

- a. U.S. House of Representatives, 1998, pg. 1356.
- b. U.S. House of Representatives, 1998, pg. 996.
- c. U.S. House of Representatives, 1998, pg. 1357.
- d. Statistical Abstract of the United States 1998, Table 291.
- e. Statistical Abstract of the United States 1998, Table 236.

Notes: “Major” programs are those that spent over \$3.5 billion in 1996 dollars in at least one year since enactment. The possible exception is worker’s compensation, which paid \$2.3 billion in benefits in 1997, but paid a total of \$4.3 billion in combined benefits and medical expenses in 1993. I could not find more recent data on the combined expenditure and have therefore omitted this program from the table.

Table 3 Disposable Income for a Single Mother with Two Children Earning \$10,000 in 1986 and 1997 (1997 dollars)

Year	Federal Tax	Means-Tested Benefit	Child Care Cost	Child Care Subsidy	EITC	Disposable Income	Effective Earnings Tax Rate	Medical Coverage
1986	-894	-5,924	-2,000	746	179	2,107	79%	No coverage
1997	-765	-4,967	-2,000	3,656	1,000	6,924	31%	Children < 15 covered

Source: Ellwood 1999, Table 3.

Table 4 Composition of Families with Children under Age Eighteen, Selected Years

Year	Number of Families with Children (millions)	Number of Families Headed by Women (million)	Percent of Families Headed by Women	Percent of Female Headed Families Headed by a Never Married Woman
1970	29.6	3.4	11.5	7.3
1980	32.2	6.2	19.4	17.1
1985	33.4	7.7	23.1	28.5
1990	34.7	8.4	24.2	33.0
1992	35.4	9.0	25.5	36.4
1996	37.1	9.9	26.7	37.4

U.S. House of Representatives 1998 pg 1249.

Table 5 Caseloads and Participation Rates in the United States AFDC Program, 1970 to 1996

<i>Year</i>	<u>Number of Recipients*</u>	<u>As Percent of Population</u>	<u>As Percent of Children</u>	<u>As Percent of Poor Children</u>
1970	7,429	4.1	8.8	58.5
1971	9,556	4.9	10.5	69.2
1972	10,632	5.1	11.2	75.5
1973	11,038	5.1	11.3	80.5
1974	10,845	5.0	11.3	75.7
1975	11,067	5.2	11.8	71.6
1980	10,597	4.7	11.5	63.2
1985	10,813	4.5	11.2	54.4
1987	11,065	4.5	11.4	56.4
1988	10,920	4.4	11.5	58.8
1990	11,460	4.5	11.9	59.0
1991	12,595	4.9	12.9	60.0
1993	14,144	5.5	14.8	NA
1995	13,619	5.2	14.2	NA
1996	12,649	4.8	13.3	NA

* In thousands, NA means not available.

Source: House Ways and Means Committee 1998, Table 7-2 and 7-10. House Ways and Means Committee 1993, Table 26, pg. 688.

Table 6 Living Arrangements of Children under Age Eighteen, Selected Years

Year	Percent Living With Two Parents	Percent Living with One Parent	Percent Living with No Parent
1960	87.7	9.1	3.2
1970	85.2	11.9	2.9
1980	76.7	19.7	3.7
1990	72.5	24.7	2.8
1996	68.0	27.9	4.1

U.S. House of Representatives, 1998 pg 1250

Table 7 Recent Studies of the Effect of Economic and Program Variables on AFDC Caseloads

Study	Data	Dependent Variable	Included Variables	Variance in Caseload Explained:	Change in Caseload due to 1-pt rise in UR leads to:	Waiver leads to
Blank, 1997	Annual state panel 1977-95	<i>ln</i> (AFDC caseloads/ female population aged 15-44) AFDC-B AFDC-UP	UR (plus lags), waivers (plus lead, Demographic, political State effects Year effects	Economic factors: 23% in 1990-94 51% in 94-95	3.8% rise in AFDC-B 3.5% rise in AFDC-B 20% rise in AFDC-UP (18-months)	-10.7% change in AFDC-B
Wallace and Blank 1999	Same as above	Same as above	Same as above	NA	UR: 6% over three years	-7.2
CEA, 1997	Annual state panel 1976-96	<i>ln</i> (AFDC recipients/total population)	UR (plus lag), Waiver (plus lead), benefit level State effects Year effects State/year trend	Economic factors: 24% - 31% in 1989-93, 31%-45% in 1993-96	4.1% -5 %	-5.2% to -12.5%
Levine and Whitmore 1997	Same as CEA	Same as CEA	Same as CEA, with more detail on waivers	Same as CEA	NA	NA

Table 7, continued

Study	Data	Dependent Variable	Included Variables	Variance in Caseload Explained:	Change in Caseload due to 1-pt rise in UR leads to:	Waiver leads to
Ziliak et al. 1997	Monthly and annual state panel 1987-96	Same as CEA	UR, employment per capita (11 lags), Waivers (plus lag) State effects Year effects seasonality	Economic and seasonal effects: 78 % Waivers: 1%	4.1%	-9.1%
Figlio and Ziliak 1999	Same as CEA	Same as CEA and per capita caseloads (with 6 lags)	UR, employment per capita (11 lags), Waivers (plus lag) State effects Year effects seasonality,	Economic factors: 75% Waivers: +5.7%	5.9 %	6.0%
Bartik and Eberts 1999	Annual state panel 1994-96	Same as CEA	UR, other measures of economic conditions, waivers State effects Year effects	UR: 3.3% - 7.9% Employment Growth :7.8% Industry Composition: 33.9% Waiver: .3%	3.3% -7.9%	NA

Study	Data	Dependent Variable	Included Variables	Variance in Caseload Explained:	Change in Caseload due to 1-pt rise in UR leads to:	Waiver leads to
Lewin Group	1979-1994	ln caseloads ln (participation/expected participation)	UR, size and age of state population; marriage, births, divorce, benefit rate, benefit reduction rate, income limits		2.4% in AFDC- Basic 26% in AFDC-UP after 14 quarters	NA
Moffitt 1999	Same as CEA except for 1977-1995 with additional data from CPS	Same as CEA <i>ln</i> (Number of women 16-54 years with AFDC/total number of women 16-54 years	Same as CEA, with addition of individual level variable	NA	4.6%	- 15.05%

Notes: UR = average annual unemployment rates

Table 8 Change in the Food Stamp Program Caseload
by Type of Eligible, 1994 to 1997

Recipient Type	Percent Change	Share of Decline
Legal Immigrants	54	14
Childless Unemployed Adults	-44	8
AFDC Recipients	-28	61
All other Participants	-8	17
Total	-22	100

Source: Trippe and Doyle (1998), Table 1.

Figure 1: State and Federal Social Welfare Expenditures (Excluding Education) by Program Area

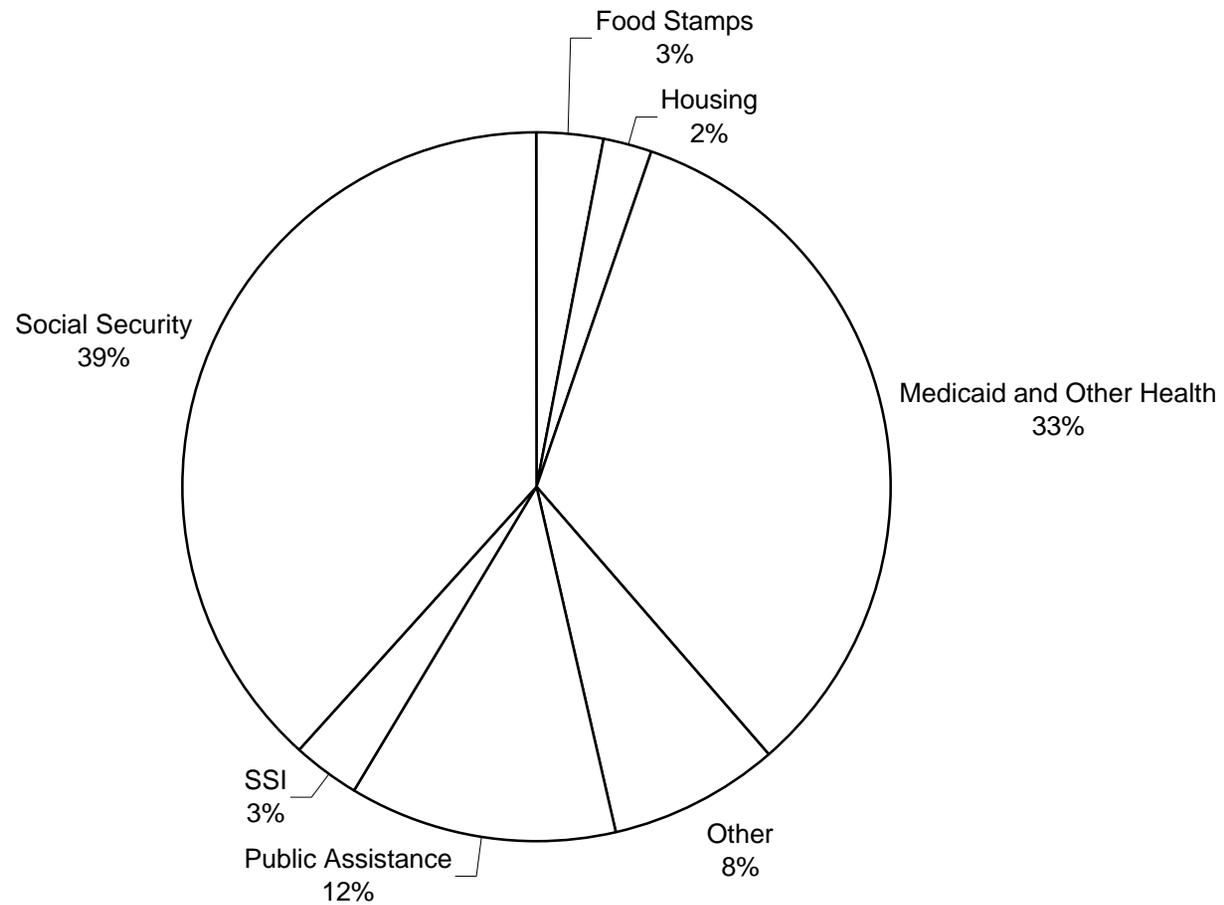


Figure 2: Trends in Expenditures on Social Welfare Programs in the United States

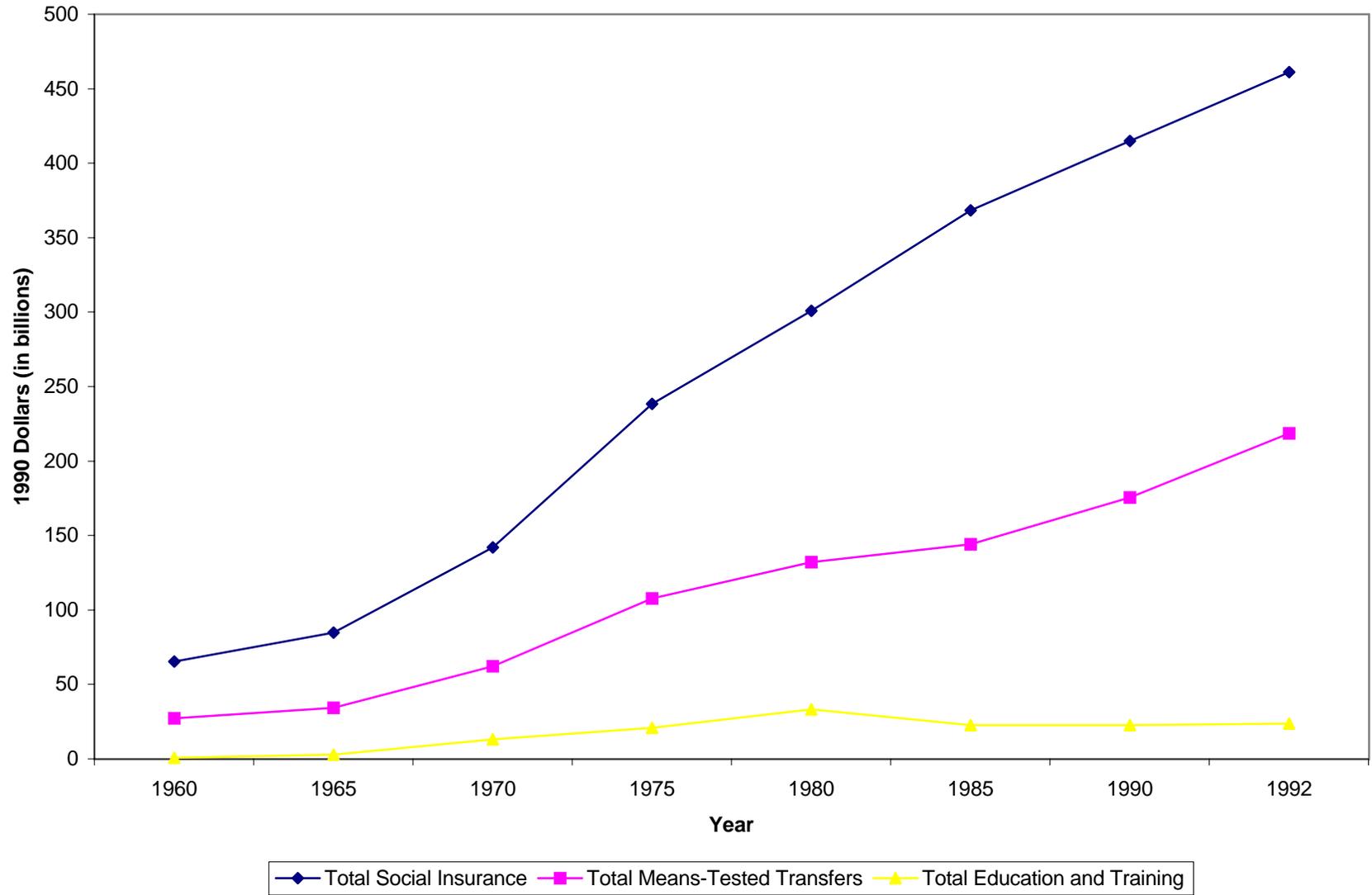


Figure 3: Trends in Expenditures on Mean-Tested Cash Transfers

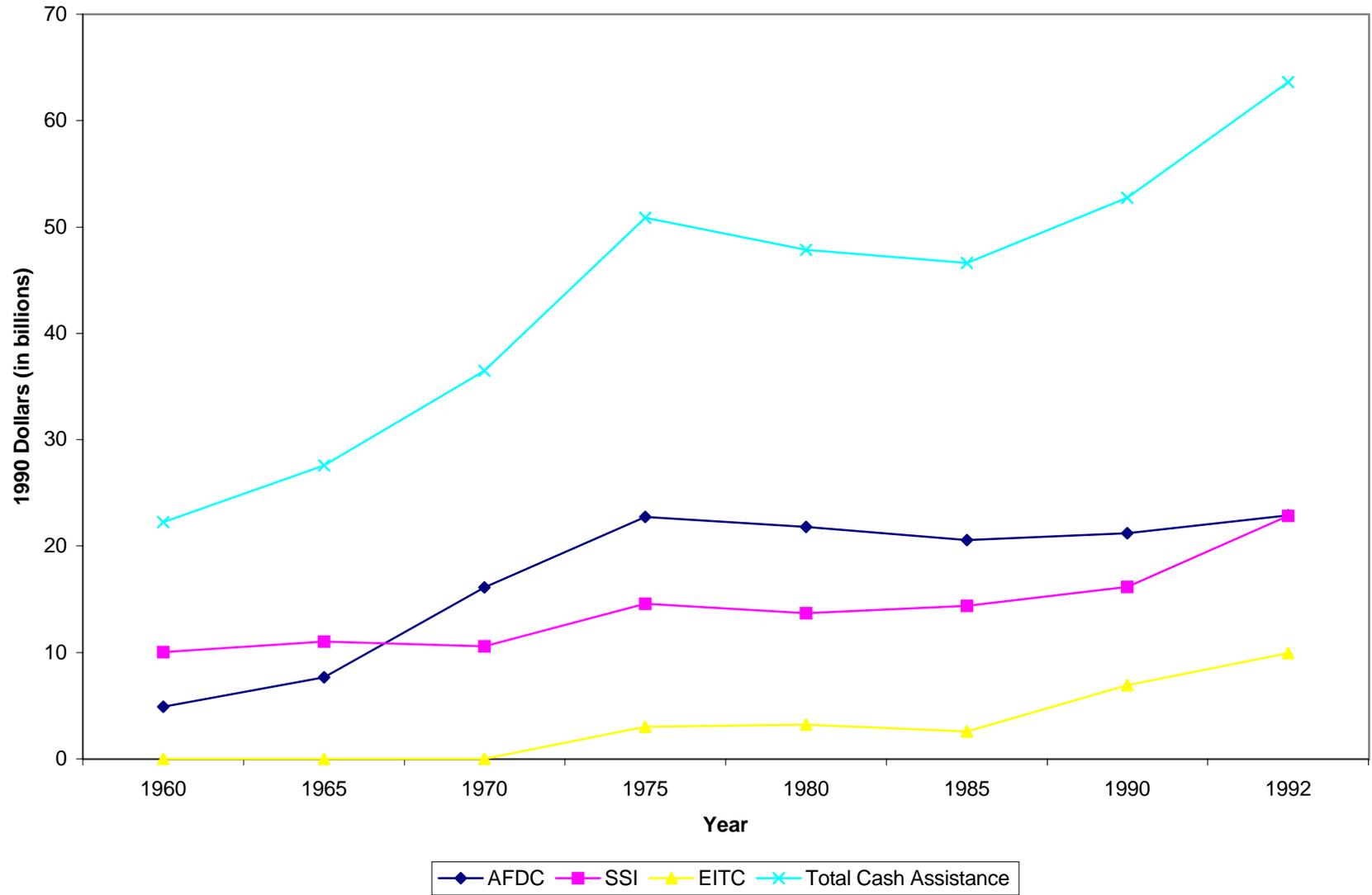


Figure 4: Trends in Expenditures on Means-Tested Non-Cash Transfers

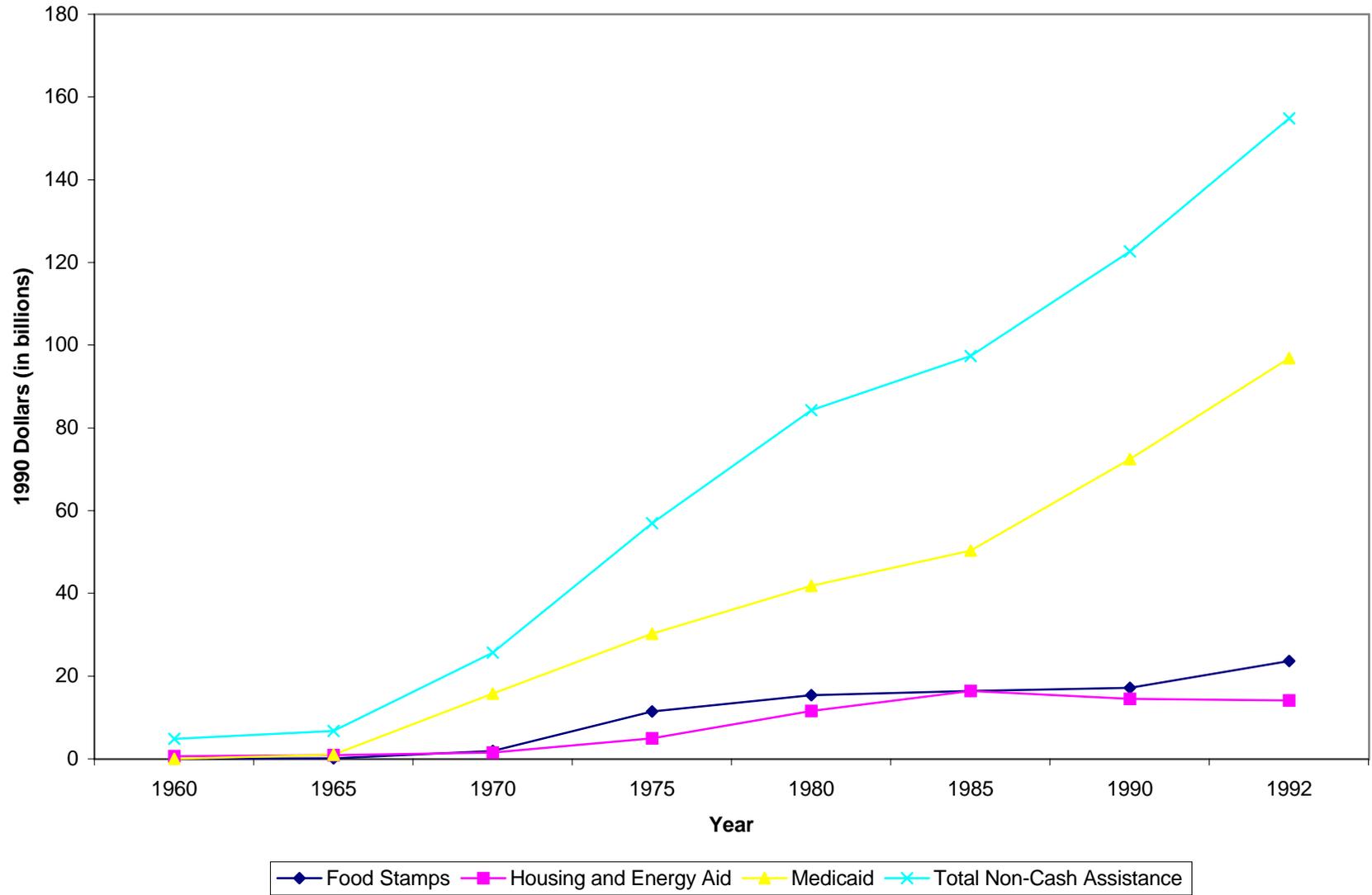


Figure 5: Trends in Expenditures on Means-Tested Cash, Non-Cash, and Education and Training Programs

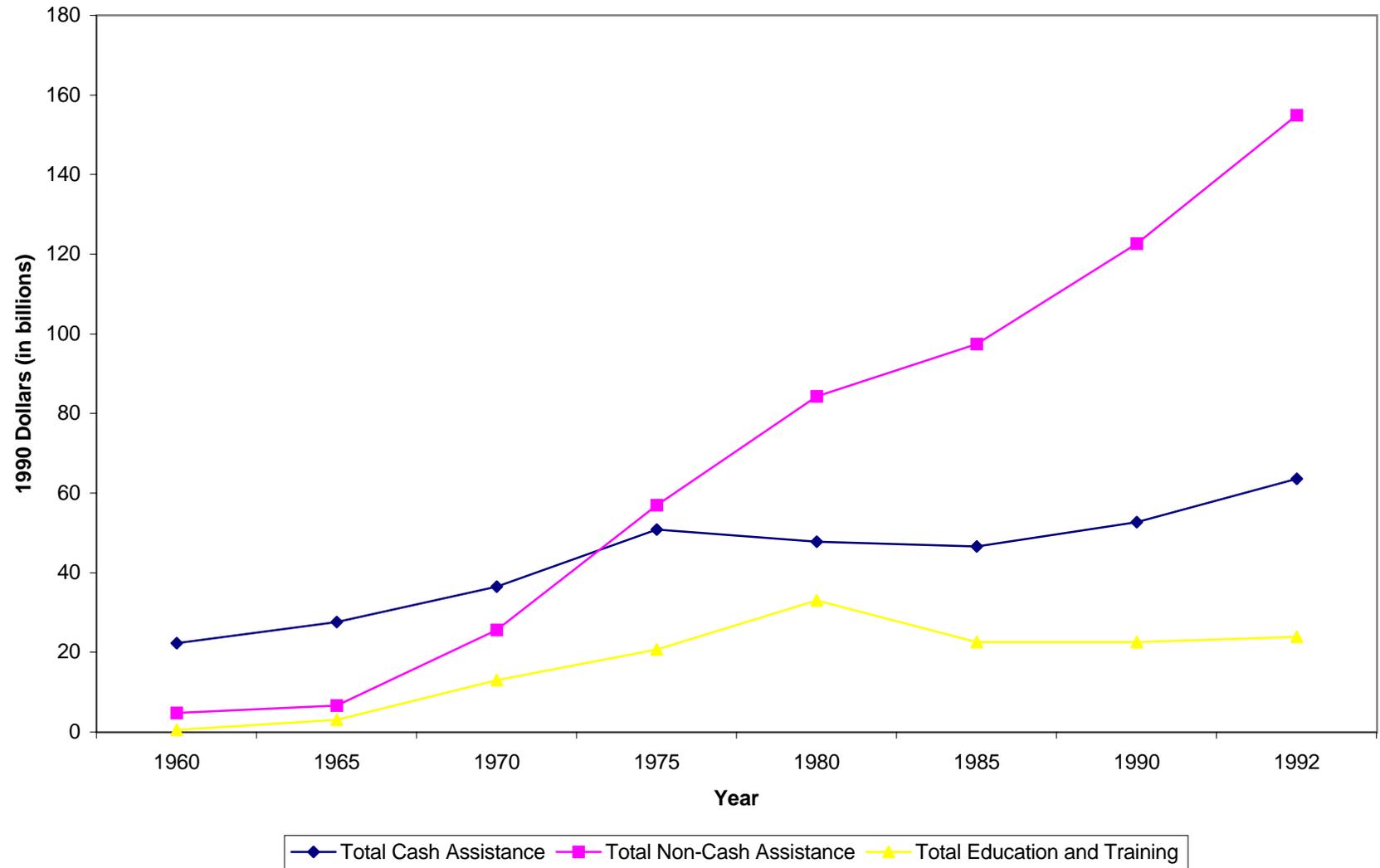


FIGURE 6: TRENDS IN MONTHLY AFDC BENEFIT LEVELS

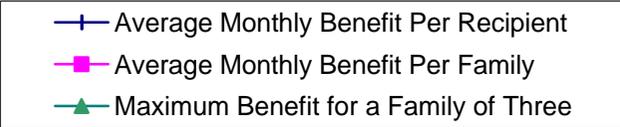
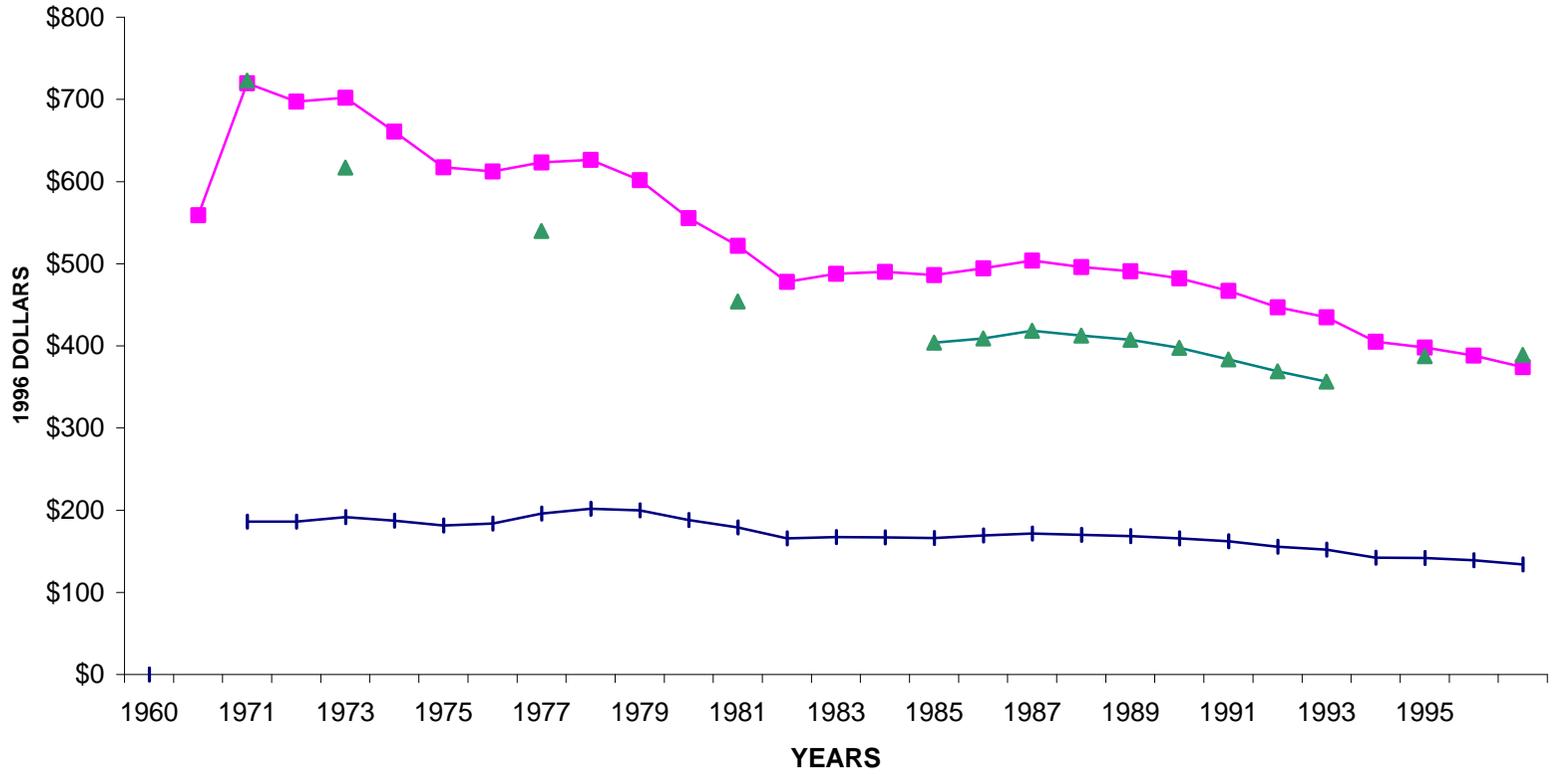


Figure 7: TRENDS IN MONTHLY FOOD STAMP BENEFIT LEVELS PER PERSON

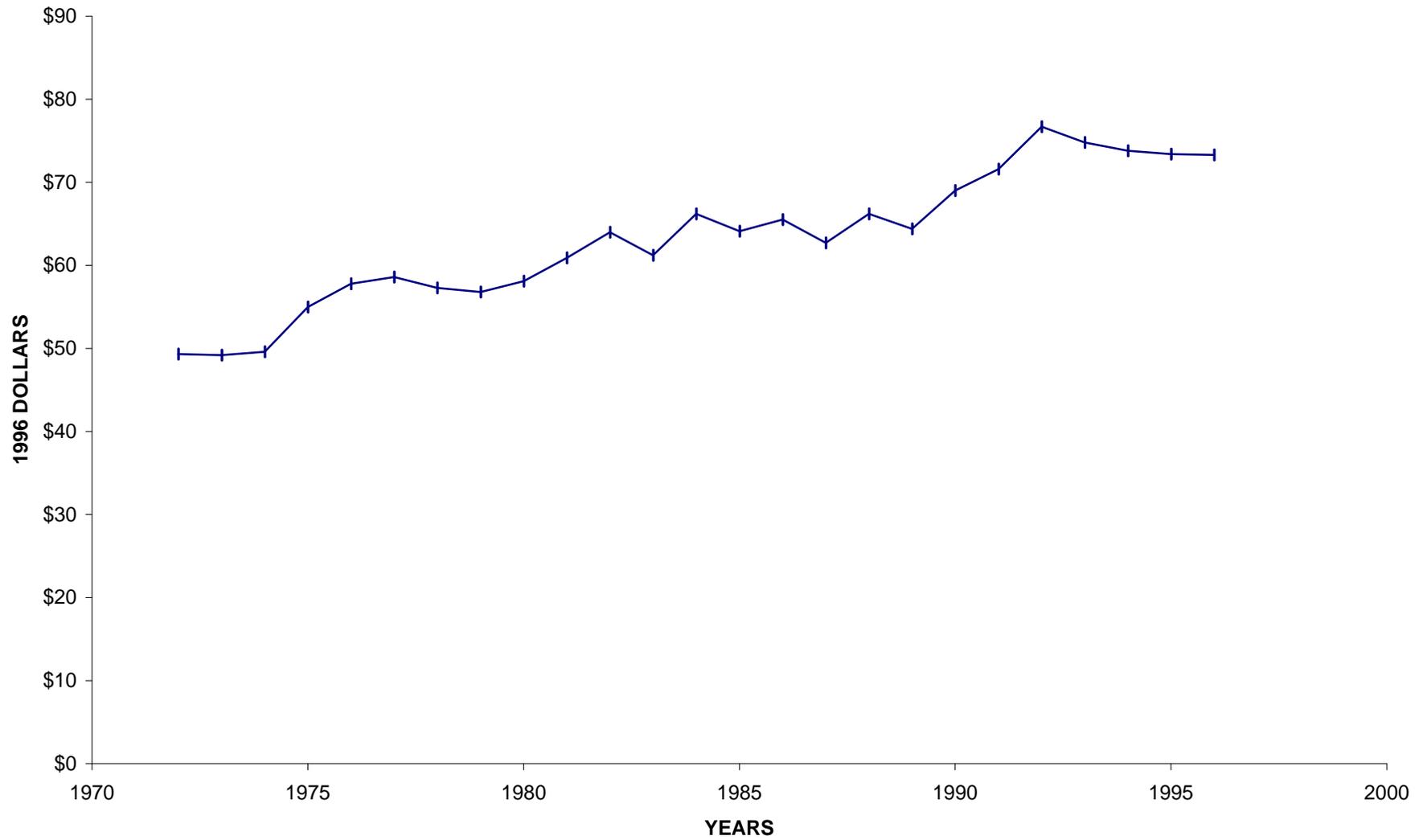


FIGURE 8: TRENDS IN AFDC CASELOADS

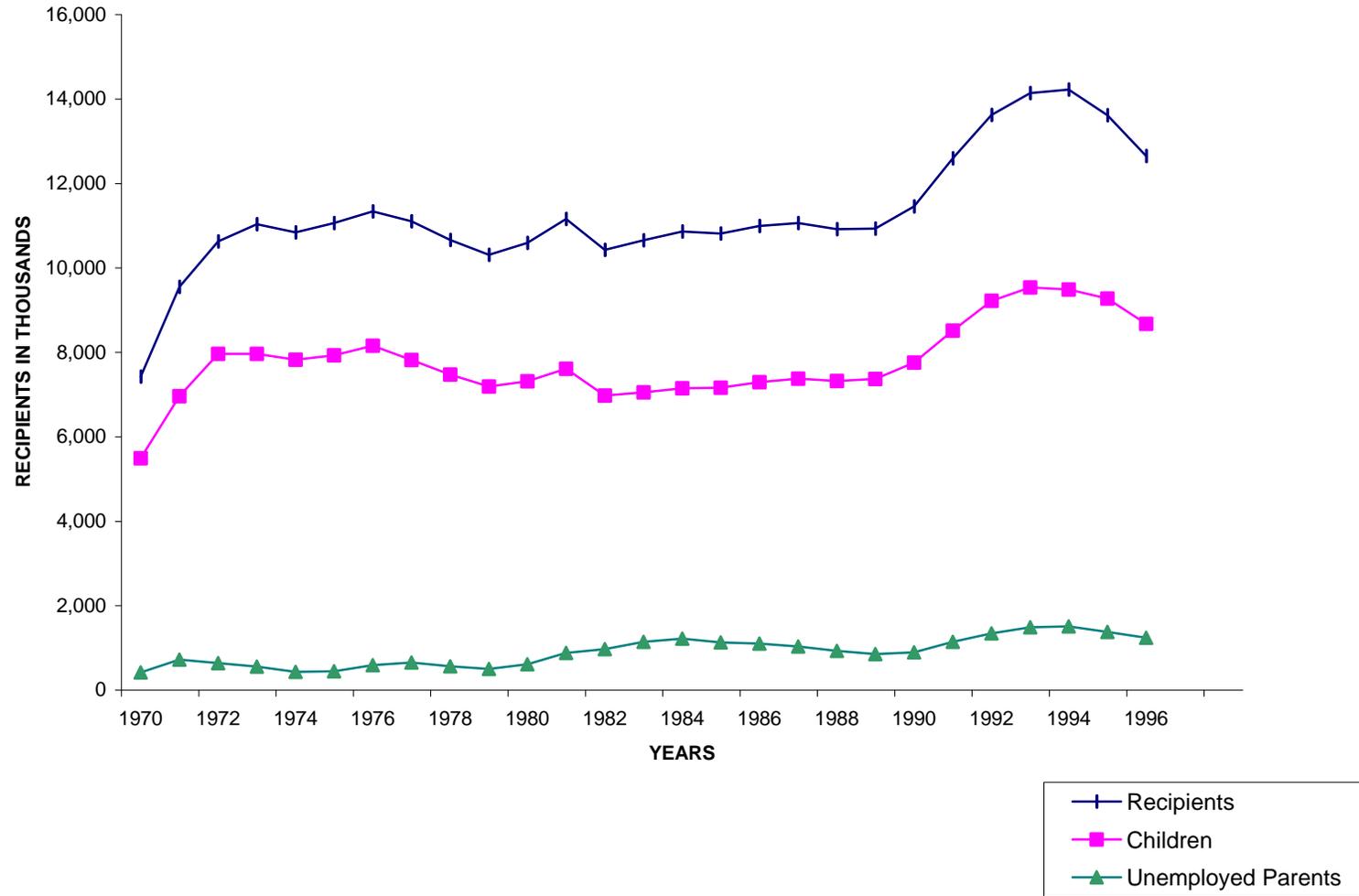


FIGURE 9: TREND IN SSI CASELOADS

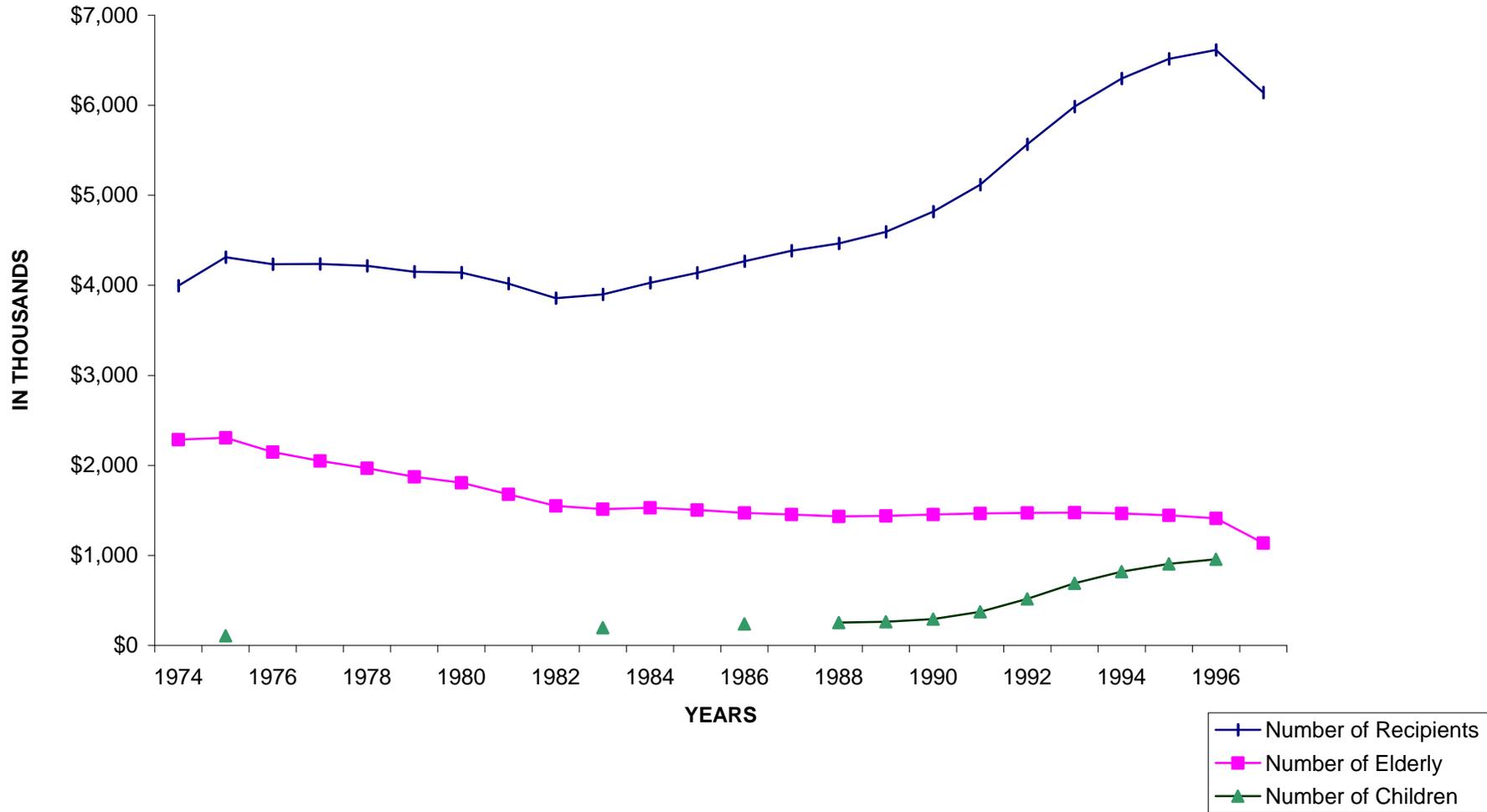


Figure 10: TRENDS IN FOOD STAMPS CASELOADS

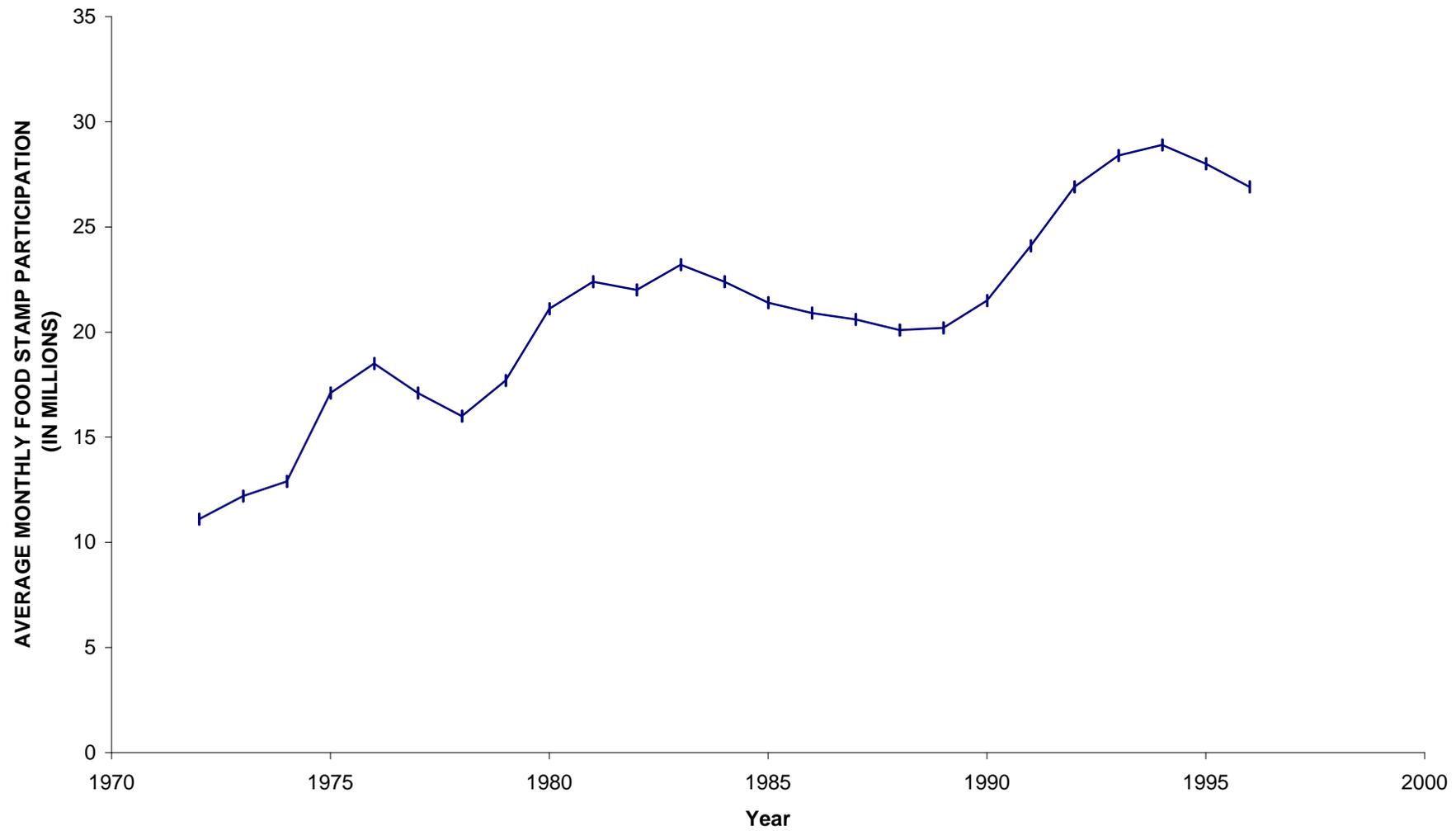


Figure 11: Heuristic Model of Factors Affecting Welfare Caseloads

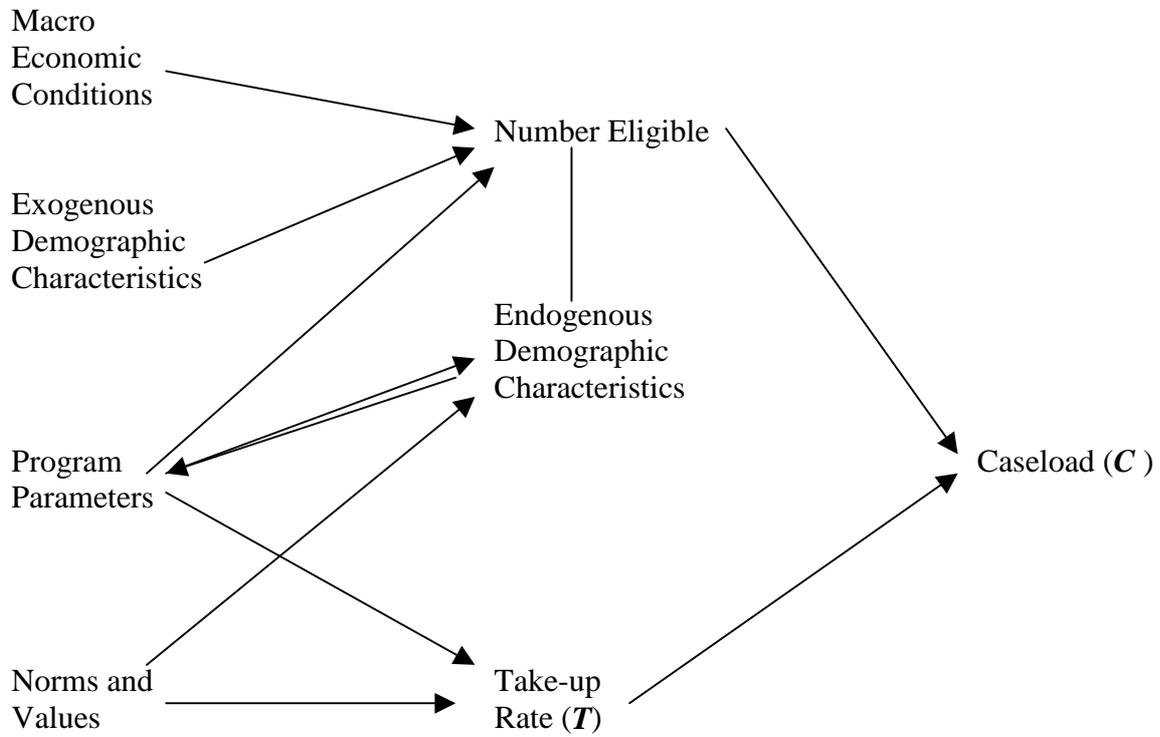


Figure 12: TRENDS IN CIVILIAN UNEMPLOYMENT RATE

